

Papers Published Using York Center Instrumentation (2019-2022)

Center of Materials for Advanced Energetics – Director Prof. Edward Dreizin

1. Gandhi, P., Valluri, S.K., Schoenitz, M., Dreizin, E.L. Effect of organic liquid process control agents on properties of ball-milled powders. *Advanced Powder Technology* 13, 103332 (2022)
2. Hastings, D., Rodriguez, N., McCann, H., Schoenitz, M., Dreizin, E.L. Titanium-boron reactive composite powders with variable morphology prepared by arrested reactive milling. *Fuel* 310 122313 (2022)
3. Vasudevan, A., Schoenitz, M., Dreizin, E.L. Effect of metal nitrate on mechanochemical nitration of toluene. *Reaction Chemistry and Engineering* 10.1039/D1RE00307K (2021)
4. Valluri, S.K., Schoenitz, M., Dreizin, E.L. Ignition Mechanisms of Reactive Nanocomposite Powders Combining Al, B, and Si as Fuels with Metal Fluorides as Oxidizers. *Combustion Science and Technology* (2021)
5. Vasudevan, A., Schoenitz, M., Dreizin, E.L. Parameters affecting mechanochemical nitration of aromatic precursors. *Chemical Engineering Science* 246, 116906 (2021)
6. Valluri, S.K., Gandhi, P.M., Schoenitz, M., Dreizin, E.L. Boron-rich composite thermite powders with binary $\text{Bi}_2\text{O}_3 \cdot \text{CuO}$ oxidizers. *Energy & Fuels*, 35, pp. 10327-10338 (2021)
7. Valluri, S.K., Schoenitz, M., Dreizin, E.L., Combustion of Composites of Boron with Bismuth and Cobalt Fluorides in Different Environments. *Combustion Science and Technology* 193: 8 pp. 1343-1358 (2021)
8. Mursalat, M., Schoenitz, M., Dreizin, E.L., Neveu, A., Francqui, F., Spherical boron powders prepared by mechanical milling in immiscible liquids. *Powder Technology*, 388, pp. 41-50 (2021)
9. Matveev, S., Dlott, D.D., Valluri, S.K., Mursalat, M., Dreizin, E.L. Fast energy release from reactive materials under shock compression. *Applied Physics Letters*, 118, 101902 (2021)
10. Huang, C., Schoenitz, M., Dreizin, E.L., Ignition of zirconium powders placed near an electrostatic discharge. *Combustion and Flame* 226, pp. 1-13 (2021)

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12. Hastings, D., Schoenitz, M., Dreizin, E.L., Highly reactive spheroidal milled aluminum. *Materialia* 15 100959 (2021)
13. Chintersingh, K-L., Schoentiz, M., Dreizin, E.L., Effect of Purity, Surface Modification and Iron Coating on Ignition and Combustion of Boron in Air. *Combustion Science and Technology* 193:9, pp. 1567-1586 (2021)
14. Valluri, S.K., Schoenitz, M., Dreizin, E.L., Preparation and characterization of silicon-metal fluoride reactive composites. *Nanomaterials* 10, 2367 (2020)
15. Valluri, S.K., Schoenitz, M., Dreizin, E.L. Bismuth fluoride-coated boron powders as enhanced fuels. *Combustion and Flame* 221, pp. 1 - 10 (2020)
16. Vasudevan, A.K., Schoenitz, M., Dreizin, E.L., Mechanochemical nitration of toluene with metal oxide catalysts. *Applied Catalysis A: General* 601, 117604 (2020)
17. Valluri, S.K., Ravi, K.K., Schoenitz, M., Dreizin, E.L., Effect of boron content in B·BiF₃ and B·Bi composites on their ignition and combustion. *Combustion and Flame* 215, pp. 78-85 (2020)
18. Hastings, D., Schoenitz, M., Dreizin, E.L. Zirconium-boron reactive composite powders prepared by arrested reactive milling. *Journal of Energetic Materials* 38(2), pp. 142-161 (2020)
19. Mursalat, M., Schoenitz, M., Dreizin, E.L. Effect of premilling Al and CuO in acetonitrile on properties of Al·CuO thermites prepared by arrested reactive milling. *Combustion and Flame* 214, pp. 57-64 (2020)
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<https://doi.org/10.1080/00102202.2019.1680653>, (2019)
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35. Lagoviyer, O.S., Schoenitz, M., Dreizin, E.L. Effect of process parameters on mechanochemical nitration of toluene. *Journal of Materials Science* 53, pp. 13690-13700 (2018)

Advanced Biomaterials Translation Laboratory – Director Prof. Vivek Kumar

1. A. Griffith, A. Mateen, K. Markowitz, S. Singer, C. Cugini, E. Shimizu, G. Wiedman, V. Kumar. Alternative Antibiotics in Dentistry: Antimicrobial Peptides. *Pharmaceutics*, 14, 1679, 2022
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Particle Engineering and Pharmaceutical Nanotechnology Laboratory – Director Prof. Ecevit Bilgili

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Milling of Drug Suspensions,” *Pharmaceutical Research*, 2022, Vol. 39, pp. 2065–2082 (I.F.: 4.580)

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Fluid Locomotion Laboratory – Director Prof. Brooke Flammang

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The BioSMART Center – Director Prof. Omovunmi Sadik

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Sustainable Environmental Nanotechnology and Nanointerfaces Laboratory – Director Prof. Wen Zhang

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Applied Electrohydrodynamics Laboratory – Director Prof. Boris Khusid

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Environmental Systems Laboratory – Director Prof. Lisa Axe

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