

Carole Rossi 's team – full list of journal articles

2023

Editorial : Metallized reactive materials, a road to clean and sustainable pyrotechnics, **Propellants Explos. Pyrotech.** 2023, 48 (5) <https://doi.org/10.1002/prep.202380531>

- V. Singh, T. Wu, E. Hagen, L. Salvagnac, C. Tenailleau, A. Estève, M. R. Zachariah, C. Rossi, How positioning of a hard ceramic TiB₂ layer in Al/CuO multilayers can regulate the overall energy release behavior, **Fuel**, Volume 349, 2023, 128599 <https://doi.org/10.1016/j.fuel.2023.128599>
- E. Tichtchenko, B. Bedat, O. Simonin, L. Glavier, D. Gauchard, A. Esteve, C. Rossi, Comprehending the influence of the particle size and stoichiometry on Al/CuO thermite combustion in close bomb: a theoretical study, **Propellants Explos. Pyrotech.**, 2023, <https://doi.org/10.1002/prep.202200334>
- T. Wu, V. Singh, B. Julien, C. Tenailleau, A. Estève, C. Rossi, Pioneering insights into the superior performance of titanium as a fuel in energetic materials, **Chemical Engineering Journal**, 453, 2, 2023, 139922
- H. Jabraoui, Songwook, A. Esteve, C. Rossi, Initial Stage of Titanium Oxidation in Ti/CuO Thermites: a Molecular Dynamics Study Using ReaxFF Forcefields, **Physical Chemistry Chemical Physics**, 2023, 25, 16, 11268 – 11277 <https://doi.org/10.1039/D3CP00032J>
- H. Jabraoui, M. Djafari Rouhani, C. Rossi, A. Esteve, First-principles investigation of CuO decomposition and its transformation into Cu₂O, **Phys. Rev. Materials** 6, 9, 096001 <https://doi.org/10.1103/PhysRevMaterials.6.096001>

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Editorial : Miniaturized Pyrotechnic Systems, meet the performance need while limiting the environmental impact, **Micromachines** 2022, 13(3) <https://doi.org/10.3390/mi13030376>

- H. Jabraoui, A. Esteve, M. Schoenitz, EL. Dreizin, C. Rossi, Atomic scale insights into the first reaction stages prior to Al/CuO nanothermite ignition: influence of porosity, **ACS applied materials & interfaces** 14 (25), 29451-29461 <https://doi.org/10.1021/acsami.2c07069>
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- M-I. Mendoza-Diaz, A. Balocchi, KA. Oyekan, K. Tan, WG. Vandenberghe, A. Esteve, C. Rossi, Dominant role of OH⁻ and Ti interstitial defects on the electronic structure of TiO₂ thin films for water splitting, **Journal of Dalton Transactions**, 2022 <https://doi.org/10.1039/D2DT01871C>
- V. Singh, B. Julien, L. Salvagnac, S. Pelloquin, T. Hungria, C. Josse, M. Belhaj, C. Rossi*, Influence of process parameters on energetic properties of sputter-deposited Al/CuO reactive multilayers, **Nanotechnology**, 2022, 33 465704 <https://doi.org/10.1088/1361-6528/ac85c5>
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