Loic Constantin

901 N 17th St, Lincoln, NE 68508

Phone: +1(402) 730 8454 Email: constantin.loic@gmail.com

RESEARCH INTERESTS

Composite Materials :

Development of new composites materials trough interphase engineering to enhance their properties such as thermal, electrical and mechanical. Synthesis of composites via powder metallurgy and additive manufacturing.

Extreme environment protection

Protection of carbon materials against extreme environment via a thin or complex coated layer of refractory carbides.

Diamond coating assisted lasers

Fabrication of diamond films by Chemical Vapor Deposition (CVD) on several substrates such as silicon, copper, tungsten carbide. To improve the quality and growth rate of diamond films, different lasers are introduced in the process.

EDUCATION

B.S /// 2011-2014

General Chemistry

University of Bordeaux (France)

M.S /// 2014 - 2016

Chemistry and physical chemistry of materials

University of Bordeaux (France)

Dual PhD /// 2016 – Present (GPA: 4.0)

Material science / Electrical engineering

University of Bordeaux (France) / Nebraska (USA)

Publications

- **Loic Constantin** et al. "Laser sintering of cold-pressed Cu powder without binder use", Materialia, DOI : :10.1016 /j.mtla. 2018.08.021

- Lisha Fan, **Loic Constantin**, et al. "Ultraviolet laser photolysis of hydrocarbons for nondiamond carbon suppression in chemical vapor deposition of diamond films", Nature: Light Sci. Appl., doi: 10.1038/lsa.2017.177

- **Loic Constantin**, Lisha Fan, et al. "Effects of laser photolysis of hydrocarbons at 193 and 248 nm on chemical vapor deposition of diamond films", ACS Crystal growth & Design, DOI: 10.1021/acs.cgd. 8b00084

- Xueliang Yan, **Loic Constantin** et al. "$Hf_{0.2}Zr_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})C$ high entropy ceramics with low thermal conductivity" Journal of American Ceramic Society, DOI: 10.1111/jace.15779