

IDENTIFYING INFORMATION:

NAME: Vlassiouk, Ivan

ORCID iD: <https://orcid.org/0000-0002-5494-0386>

POSITION TITLE: Scientist

PRIMARY ORGANIZATION AND LOCATION: Oak Ridge National Laboratory, Oak Ridge, Tennessee, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
New Mexico State University, Las Cruces, New Mexico, United States	PHD	01/2006	Chemistry
Novosibirsk State University, Novosibirsk, Not Applicable, N/A, RU	MS	06/2000	Chemistry

Appointments and Positions

2009 - present Scientist, Oak Ridge National Laboratory, Oak Ridge, Tennessee, United States

2006 - 2009 Postdoctoral, University of California, Irvine, California, United States

Products**Products Most Closely Related to the Proposed Project**

- Vlassiouk I, Smirnov S, Poretzky A, Olunloyo O, Geohegan D, Dyck O, Lupini A, Unocic R, Meyer H, Xiao K, Briggs D, Lavrik N, Keum J, Cakmak E, Harris S, Checa M, Collins L, Lasseter J, Emery R, Rayle J, Rack P, Stehle Y, Chaturvedi P, Kidambi P, Gu G, Ivanov I. Armor for Steel: Facile Synthesis of Hexagonal Boron Nitride Films on Various Substrates. *Advanced Materials Interfaces*. 2023 October 20; :- . Available from: <https://onlinelibrary.wiley.com/doi/10.1002/admi.202300704> DOI: 10.1002/admi.202300704
- Vlassiouk I, Stehle Y, Pudasaini P, Unocic R, Rack P, Baddorf A, Ivanov I, Lavrik N, List F, Gupta N, Bets K, Yakobson B, Smirnov S. Evolutionary selection growth of two-dimensional materials on polycrystalline substrates. *Nature Materials*. 2018 March 12; 17(4):318-322. Available from: <https://www.nature.com/articles/s41563-018-0019-3> DOI: 10.1038/s41563-018-0019-3
- Vlassiouk I. A scalable graphene-based membrane. *Nature Nanotechnology*. 2017; 12(11):1022-1023. Available from: <https://www.nature.com/articles/nnano.2017.184> DOI: 10.1038/nnano.2017.184
- Stehle Y, Meyer H, Unocic R, Kidder M, Polizos G, Datskos P, Jackson R, Smirnov S, Vlassiouk I. Synthesis of Hexagonal Boron Nitride Monolayer: Control of Nucleation and Crystal Morphology. *Chemistry of Materials*. 2015 November 18; 27(23):8041-8047. Available from: <https://pubs.acs.org/doi/10.1021/acs.chemmater.5b03607> DOI: 10.1021/acs.chemmater.5b03607
- Vlassiouk I, Polizos G, Cooper R, Ivanov I, Keum J, Paulauskas F, Datskos P, Smirnov S. Strong and Electrically Conductive Graphene-Based Composite Fibers and Laminates. *ACS Applied Materials & Interfaces*. 2015 May 12; 7(20):10702-10709. Available from:

<https://pubs.acs.org/doi/10.1021/acsami.5b01367> DOI: 10.1021/acsami.5b01367

Other Significant Products, Whether or Not Related to the Proposed Project

1. Chaturvedi P, Moehring N, Knight T, Shah R, Vlassioux I, Kidambi P. The parameter space for scalable integration of atomically thin graphene with Nafion for proton exchange membrane (PEM) applications. *Materials Advances*. 2023; 4(16):3473-3481. Available from: <http://xlink.rsc.org/?DOI=D3MA00180F> DOI: 10.1039/D3MA00180F
2. Stehle Y, Robertson E, Cortez R, Vlassioux I, Bucinell R, Olsson K, Kilby L. Using Al³⁺ to Tailor Graphene Oxide Nanochannels: Impact on Membrane Stability and Permeability. *Membranes*. 2022 September 09; 12(9):871-. Available from: <https://www.mdpi.com/2077-0375/12/9/871> DOI: 10.3390/membranes12090871
3. Chaturvedi P, Moehring N, Cheng P, Vlassioux I, Boutilier M, Kidambi P. Deconstructing proton transport through atomically thin monolayer CVD graphene membranes. *Journal of Materials Chemistry A*. 2022; 10(37):19797-19810. Available from: <http://xlink.rsc.org/?DOI=D2TA01737G> DOI: 10.1039/D2TA01737G
4. Ivan Vlassioux, Pavan Chaturvedi, Dhanraj Shinde, Sergei Smirnov, Georgios Polyzos. Innovative Proton Conductive Membranes Based on Two-Dimensional Materials. 2022 April. Available from: <https://doi.org/10.2172/1863321> DOI: 10.2172/1863321
5. Strelcov E, Arble C, Guo H, Hoskins B, Yulaev A, Vlassioux I, Zhitenev N, Tselev A, Kolmakov A. Nanoscale Mapping of the Double Layer Potential at the Graphene–Electrolyte Interface. *Nano Letters*. 2020 January 28; 20(2):1336-1344. Available from: <https://pubs.acs.org/doi/10.1021/acs.nanolett.9b04823> DOI: 10.1021/acs.nanolett.9b04823

Synergistic Activities

1. Entrepreneurial Leave 2017-2021. <https://generalgraphenecorp.com/>

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Vlassioux, Ivan in SciENCv on 2023-11-06 09:59:10