

## Yury Gogotsi

Drexel University, Department of Materials Science and Engineering  
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### Education and Training

D.Sc. Materials Engineering, National Academy of Sciences, Ukraine, 1995

Ph.D. Physical Chemistry, Kiev Polytechnic Institute, Ukraine, 1986

M.S. Metallurgy, Kiev Polytechnic Institute, Ukraine, 1984

Post-doctoral research:

1993 – 1995 NATO/Norwegian Research Council Fellowship, University of Oslo, Norway

1992 – 1993 Japan Society for the Promotion of Science (JSPS) Fellowship, Tokyo Institute of Technology, Japan

1990 – 1992 Alexander von Humboldt Fellowship, University of Karlsruhe, Germany

### Research and Professional Experience

Drexel University, Department of Materials Science and Engineering

05/2017 – present Charles T. and Ruth M. Bach Endowed Professor

10/2010 – present Distinguished University Professor

09/2008 – present Trustee Chair Professor of Materials Science and Engineering

02/2003 – present Director, A.J. Drexel Nanomaterials Institute (DNI)

09/2002 – present Professor of Chemistry (courtesy appointment)

12/2002 – 9/2007 Associate Dean of the College of Engineering

11/2001 – present Professor of Mechanical Engineering and Mechanics (courtesy appointment)

08/2000 – 08/2008 Professor of Materials Science and Engineering

University of Illinois at Chicago (UIC), Department of Mechanical Engineering

6/1999 – 9/2000 Associate Professor of Mechanical Engineering (with tenure)

9/1999 – 8/2000 Assistant Director, UIC Research Resources Center

10/1996 – 5/1999 Assistant Professor of Mechanical Engineering

University of Tübingen, Germany

1995 - 1996 Research Scientist

Institute for Materials Science, Academy of Sciences of Ukraine, Kiev, Ukraine

1986 - 1990 Research Associate

Guest Professorships:

2016- Distinguished Visiting Professor, Shinshu University, Japan

2013 - 2014 Visiting Scientist, Oak Ridge National Laboratory, TN

2014 Guest Professor, University of Rome - Tor Vergata, Italy

2012-2015 Guest Professor, Huazhong University of Science and Technology, Wuhan, China

2008 - 2012 Cheung Kong Chair Professor (visiting), Dalian University of Technology, China

2007-2008 Guest Professor, Paul Sabatier University, Toulouse, France

1994, 1999, 2003, 2005 Guest Professor (summer appointment), University of Limoges, France

### Publications

*2 books co-authored, 13 books edited, 16 book chapters, more than 550 journal papers, 55 patents filed, more than 200 invited lectures and seminars - ISI Highly Cited researcher (2014, 2015, 2016, 2017)*

Five Most Related Publications:

1. B. Anasori, M. R. Lukatskaya, Y. Gogotsi, 2D metal carbides and nitrides (MXenes) for energy storage, *Nature Reviews Materials*, 2, 16098 (2017)
2. A. Lipatov, M. Alhabej, M. R. Lukatskaya, A. Boson, Y. Gogotsi, A. Sinitskii, Effect of synthesis on quality, electronic properties and environmental stability of individual Ti<sub>3</sub>C<sub>2</sub> MXene flakes, *Advanced Electronic Materials*, 2 (12) 1600255 (2016) (cover article)

3. M. Naguib, Y. Gogotsi, Synthesis of Two-Dimensional Materials by Selective Extraction, *Accounts of Chemical Research*, **48** (1), 128-135 (2015)
4. Z. Ling, C.E. Ren, M.-Q. Zhao, J. Yang, J. M. Giammarco, J. Qiu, M. W. Barsoum, Y. Gogotsi, Flexible and conductive MXene films and nanocomposites with high capacitance, *PNAS*, **111** (47) 16676-16681 (2014)
5. M. R. Lukatskaya, O. Mashtalir, C. E. Ren, Y. Dall'Agnese, P. Rozier, P. Louis Taberna, M. Naguib, P. Simon, M. W. Barsoum, Y. Gogotsi, Cation Intercalation and High Volumetric Capacitance of Two-dimensional Titanium Carbide, *Science*, **341**, 1502-1505 (2013)

#### Other Important Publications:

1. M. Ghidui, M. R. Lukatskaya, M.-Q. Zhao, Y. Gogotsi, M. W. Barsoum, Conductive two-dimensional titanium carbide 'clay' with high volumetric capacitance, *Nature*, **516**, 78-81 (2014)
2. Y. Gogotsi, P. Simon, True Performance Metrics in Electrochemical Energy Storage, *Science*, **334**, 917-918 (2011)
3. J. Chmiola, C. Largeot, P.-L. Taberna, P. Simon, Y. Gogotsi, Monolithic Carbide-Derived Carbon Films for Micro-Supercapacitors, *Science*, **238**, 480-483 (2010)
4. P. Simon, Y. Gogotsi, Materials for Electrochemical Capacitors, *Nature Materials*, **7**, 845-854 (2008)
5. J. Chmiola, G. Yushin, Y. Gogotsi, C. Portet, P. Simon, and P. L. Taberna, Anomalous Increase in Carbon Capacitance at Pore Sizes Less Than 1 Nanometer, *Science*, **313**, 1760-1763 (2006)

#### **Selected Synergistic Activities**

Panel Co-Chair: DOE Workshop on Basic Research Needs for Electrical Energy Storage, 2007

Faculty Coordinator: Materials for Energy Storage and Conversion – Erasmus Mundus Master's Program

Board of Directors: Materials Research Society (MRS)

Fellow: MRS, ACerS, ECS, RSC, World Academy of Ceramics, AAAS, NANOSMAT.

#### **Collaborators and Co-Editors in the Last 48 Months**

M. Barsoum, *Drexel*; H. Bau, D. Bonnell, *University of Pennsylvania*; D. Bedrov, O. Borodin, *University of Utah*; M. Chhowalla, *Rutgers*; C. Grey, *Cambridge University, UK*; S. Kalinin, E. Mamontov, D. Wesolowsky, P. Cummings, P. Kent, *ORNL*; A. Kornyshev, *Imperial College, UK*; S. Mikhailovsky, *University of Brighton, UK*; J. Qiu, *DUT, China*; S. Sanderman, *UK*; P. Simon, *Paul Sabatier University, France*

#### **Graduate and Postdoc Advisors**

G. Grathwohl, *University of Karlsruhe, Germany*; P. Kofstad, *University of Oslo, Norway* (deceased); V.A. Lavrenko, *Ukrainian Academy of Sciences*; M. Yoshimura, *Tokyo Institute of Technology*

#### **Former PhD Students and Post-docs**

A. Akpan; K. Behler, *ARL*; M. Beidaghi, *Aburn*; S. Bhattacharyya, *IISER*; Z. G. Cambaz, *TOBB UET*; S. Casimirus, *France*; K. Cook, *East. Tenn. Univ.*; L. Chen, *MATECH*; J. Chmiola, *Maxwell*; R. Dash, *SABIC*; C. Dennison, *EPFL*; S. Dimovski, *BASF*; B. Dyatkin, *NRC*; Bastian Etzold, *Univ. Erlangen*; V. Domnich, *Rutgers*; D. Ge; E. Hoffman, *SRNL*; K. Hatzell, *LBNL*; M. Havel, *Arkema*; M. Heon, *Applied Materials*; K. Jost, *3M*; T. Juliano, *High school*; M. Lukatskaya, *Stanford*; J. McDonough, *3D*; C. Karwacki, *ARL*; I. Knoke, *IP Law*; G. Korneva, *Drexel*; A. Kovalchenko, *Georgia Tech*; M. Kurtoglu, *Corning*; B.-Y. Lee, *Korea*; O. Mashtalir, *Cabot*; D. Mattia, *Univ. Bath*; V. Mochalin, *Missouri S&T*; N. Naguib, *Nalco*; M. Naguib, *ORNL*; I. Neitzel, *Hella*; A. Nikitin, *Russia*; J. Niu, *Univ. Wisconsin*; N. Orlovskaya, *U Central Florida*; S. Osswald, *Purdue*; C. Perez, *U Penn*; C. Portet; V. Presser, *INM*; M.P. Rossi, P. Ruvinsky, *BASF*; M. Schrlau, *RIT*; R. Singhal, *CVD*; M. Teresa Ubieta, *Univ. Zaragoza*; E. Vitol, *Nalco*; S. Welz, *Nalco*; H. Ye, *DuPont*; S. Yeon, *KIER*; G. Yushin, *Georgia Tech*; C. Zhang, *ECUST*