

# 백운규

서울 [공과대학 에너지공학과](#) 교수이자, [나노소자공정연구실](#)장을 겸임하고 있다.

에너지공학과 홈페이지 참고(2019.10.)

- 2020년 [최상위논문연구자](#)
- 2019년 [최상위연구자](#)

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## 목차

- [1 학력](#)
- [2 경력](#)
  - [2.1 Professional Activities](#)
- [3 연구관심분야](#)
- [4 주요연구과제](#)
- [5 주요논문](#)
- [6 저서](#)
- [7 수상](#)
- [8 언론 활동](#)

## 학력

- Ph.D. Department of Ceramic Eng., Clemson University 1991
- M.E. Materials Sci. and Eng., Virginia Polytechnic Inst. and State Univ. 1988
- B.S. Ceramic Engineering, Hanyang University 1986

## 경력

- 2010 Present, Professor, Department of Energy Engineering, Hanyang University
- 2008 Present, Technology counselor, Samsung SDI Corporate Research & Development Center
- 2007 Present, Executive Director, Research & Development Planning Center for Energy & Resources
- 2007 Present, Technology counselor, Hynix semiconductor
- 2006 2010, Professor, Division of Materials Science Engineering, Hanyang University
- 1999 2006, Professor, Department of Ceramic Engineering, Hanyang University

## Professional Activities

- 2015.03 Present, Head, Department of Energy Engineering, Hanyang University
- 2015.03 Present, Director, Future convergence Energy-Leaders BK21+ Program
- 2016.03 Present, Editorial Board, Journal of Scientific Report
- 2014.01 Present, Editorial Board, Journal of Nanomaterials
- 2012.01 2014.01, Director, International Collaborative R&D Program for Energy
- 2011.01 Present, Director, Gas-turbine R&D Program
- 2009.01 Present, HYU Distinguished Professor, Department of Energy Engineering, Hanyang Univ.
- 2007.06 Present, Director, Global Research Laboratory for Nano Device Processing Laboratory

## 연구관심분야

Energy Materials, Nano Patterning, Nano Devices Fabrication

## 주요연구과제

## 주요논문

1. Etching-in-a-Box: A Novel Strategy to Synthesize Unique Yolk-Shelled Fe<sub>3</sub>O<sub>4</sub>@Carbon with an Ultralong Cycling Life for Lithium Storage, Advanced Energy Materials (2016)
2. Graphene as an Interfacial Layer for Improving Cycling Performance of Si Nanowires in Lithium Ion Batteries, Nano Letters (2015)
3. Construction of hybrid bowl-like structures by anchoring NiO nanosheets on flat carbon hollow particles with enhanced lithium storage properties, Energy & Environmental Science, (2015)
4. Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling, Science (2015)
5. Soft network composite materials with deterministic and bio-inspired designs, Nature Communication (2015).
6. Porosity-Controlled TiNb<sub>2</sub>O<sub>7</sub> Microspheres with Partial Nitridation as A Practical Negative Electrode for High-Power Lithium-Ion Batteries, Advanced Energy Materials (2015)
7. Surface-Coverage-Dependent Cycle Stability of Core-Shell Nanostructured Electrodes for Use in Lithium Ion Batteries, Advanced Energy Materials (2014)

## 저서

## 수상

- 2022, 세계에서 가장 영향력 있는 연구자 HCR(Highly Cited Researchers) 선정<sup>[1]</sup>
- 2012, 이 달의 과학기술자상 12월 수상자 선정
- 2011, One of 100 people who will lead Korea after 10 years by Dong-A Newspaper
- 2009, The Great Scholar Award from Hanyang University
- 2008, Scientist of the Month Award from Korea Science and Engineering Foundation
- 2007, Minister's Award from the Ministry of Commerce

## 언론 활동

1. [↑](#) <뉴스H> 2023.06.07 [크로스 필드 분야 세계 최상위 연구자, 에너지공학과 백운규 교수](#)