

**Ross Coffin Purdy Award**

**History of Winners**

<b>Date Elevated:</b>	<b>Name(s)</b>	<b>Awarded for:</b>
<b>2018</b>	Nikolai Tsvetkov, Qiyang Lu, Lixin Sun, Ethan J. Crumlin and Bilge Yildiz	Improved chemical and electrochemical stability of perovskite oxides with less reducible cations at the surface Nature Materials vol 15 pages 1010-1016 (2016)
<b>2017</b>	Chuancheng Duan, Jianhua Tong, Meng Shang, Stefan Nikodemski, Michael Sanders, Sandrine Ricote, Ryan O'Hayre and Ali Almansoori	Readily Processed Protonic Ceramic Fuel Cells with High Performance at Low Temperatures Science 2015 • VOL 349 Issue 6254
<b>2016</b>	Prabeer Barpanda, Gosuke Oyama, Shin-ichi Nishimura, Sai-Cheong Chung, Atsuo Yamada	A 3.8-V earth-abundant sodium battery electrode, Nature Communications, 5: 4358, 2014
<b>2015</b>	Rémy Boulesteix, Alexandre Maître, Lucie Chrétien, Yoël Rabinovitch and Christian Sallé	Microstructural Evolution During Vacuum Sintering of Yttrium Aluminum Garnet Transparent Ceramics: Toward the Origin of Residual Porosity Affecting the Transparency, Journal of the American Ceramic Society, 96 [6] 1724–1731 (2013)
<b>2014</b>	James M. Rondinelli, Steven J. May, and John W. Freeland	Control of octahedral connectivity in perovskite oxide heterostructures: an emerging route to multifunctional materials discovery, MRS Bulletin, 37, 261-270 (2012)
<b>2013</b>	Michael Naguib, Olha Mashtalir, Joshua Carle, Volker Presser, Jun Lu, Lars Hultman, Yury Gogotsi, and Michel W. Barsoum	Two-Dimensional Transition Metal Carbides, ACS Nano, Vol. 6, No. 2., 1322-1331 (2012)
<b>2012</b>	Not Awarded for 2012	
<b>2011</b>	Daniele Pergolesi, Emiliana Fabbri, Alessandra D'Epifanio, Elisabetta Di Bartolomeo, Antonello Tebano, Simone Sanna, Silvia Licocchia, Giuseppe Balestrino, Enrico Traversa	High proton conduction in grain-boundary-free yttrium-doped barium zirconate films grown by pulsed laser deposition, Nature Materials, 9 (2010) 846-852
<b>2010</b>	Lei Yang, Shizhong Wang, Kevin Blinn, Mingfei Liu, Ze Liu, Zhe Cheng, Meilin Liu	Enhanced Sulfur and Coking Tolerance of a Mixed Ion Conductor for SOFCs: BaZr <sub>0.1</sub> Ce <sub>0.7</sub> Y <sub>0.2</sub> xYb <sub>x</sub> O <sub>3-δ</sub> , 2 October 2009 Vol. 326 SCIENCE, pp. 126-129.
<b>2009</b>	Yong Qin, Xudong Wang, & Zhong Lin Wang	Microfibre-nanowire hybrid structure for energy scavenging, Nature, Vol 451, 14 February 2008, pg 809-814.
<b>2008</b>	Yukio Sato, Takahisa Yamamoto, Yuichi Ikuhara	Atomic Structures and Electrical Properties of ZnO Grain Boundaries, J. Am. Ceram. Soc., 90 [2] (2007) 337.
<b>2007</b>	Lorenz Holzer, Beat Münch, Markus Wegmann, Philippe Gasser, Robert J. Flatt	FIB-Nanotomography of Particulate Systems—Part I: Particle Shape and Topology of Interfaces, J. Am. Ceram. Soc., 89 [8] 2577–2585 (2006).
<b>2006</b>	Chuanping Li and Mufit Akinc	Role of Bound Water on the Viscosity of Nanometric Alumina Suspensions, J. Am. Ceram. Soc., 88[6] 1448-1454 (2005).
<b>2005</b>	Xin Guo, Wilfried Sigle and Joachim Maier	Blocking Grain Boundaries in Yttria-Doped and Undoped Ceria Ceramics of High Purity, J. Am. Ceram. Soc., 86[1]77-87(2003).
<b>2004</b>	Andrew D'Souza and Carlo G. Pantano	Hydroxylation and Dehydroxylation Behavior of Silica Glass Fracture Surfaces, J. Am. Ceram. Soc., 85 [9], 1499-1504 - (2002).
<b>2003</b>	Dawn Bonnell and Sergei Kalinin	Scanning Impedance Microscopy of Electroactive Interfaces Applied Physics Letters, 78 [9] 1306-1308 - (2001).
<b>2002</b>	William W. Mullins*	
<b>2002</b>	Gregory S. Rohrer	
<b>2001</b>	Yet-Ming Chiang and Harold Ackler	Effect of Initial Microstructure on Final Intergranular Phase Distribution in Liquid-Phase Sintered Ceramics, J. AM. Ceram. Soc. 82[1]183-89 (1999)
<b>2000</b>	David S. Wilkinson	Creep Mechanisms in Multiphase Ceramic Materials, J. AM. Ceram Soc. 81 [2] 275-99 (1998)
<b>1999</b>	S. K. Lee, S. Wuttiphan and B.R. Lawn	Role of Microstructure in Hertzian Contact Damage in Silicon Nitride: I, Mechanical Characterization
<b>1998</b>	Martin P. Harmer and Laura C. Stearns	Particle-Inhibited Grain Growth in Al <sub>2</sub> O <sub>3</sub> -SiC: Parts I and II
<b>1997</b>	Peter Greil	Active Filler-Controlled Pyrolysis of Pre-ceramic Polymers

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<b>Date Elevated:</b>	<b>Name(s)</b>	<b>Awarded for:</b>
1996	Hans J. Schmutzler, Michael M. Antony, and Kenneth H. Sandhage	A Novel Reaction Path to BaTiO <sub>3</sub> by the Oxidation of a Solid Metallic Precursor
1995	Jackie Y. Ying, Jay B. Benziger, Alexandra Navrotsky	Structural Evolution of Colloidal Silica in Gels to Glass
1994	I-Wei Chen, Shih-Yu Liu	Fatigue Deformation Mechanisms in Zirconia Ceramics
1993	Kuan-Zong Fung, Anil V. Virkar	Phase Stability, Phase Transformation Kinetics, and Conductivity of Y <sub>2</sub> O <sub>3</sub> -Bi <sub>2</sub> O <sub>3</sub> Solid Electrolytes Containing Aliovalent Dopants
1992	Subra Suresh, Toshio Nakamura, Yehoshua Yeshurun, Kwanho Yang, Jacques Duffy	Tensile Fracture Toughness of Ceramic Materials: Effects of Dynamic Loading and Elevated Temperatures
1991	Rowland M. Cannon, W. Craig Carter	Interplay of Sintering Microstructures, Driving Forces, and Mass Transport Mechanisms
1990	Paul F. Becher, Chun-Hway Hseuh, Peter Angelini, Terry N. Tiegs	Toughening Behavior in Whisker-Reinforced Ceramic Matrix Composites
1989	D.B. Marshall, W.C. Oliver	Measurement of Interfacial Mechanical Properties in Fiber Reinforced Ceramic Composites
1988	J.G. Bednorz, K.A. Muller	Possible High T <sub>c</sub> Superconductivity in the Ba-La-Cu-O System
1987	T.A. Michalske, E.R. Fuller, Jr.	
1986	G.W. Scherer	
1985	Yao Xi, H. McKinstry and L.E. Cross	
1984	P.J. Lemaire, H. Kent Bowen	
1983	William H. Rhodes	
1982	David R. Clarke, Fred F. Lange	
1981	Arthur H. Heuer	
1980	Man F. Yan, David W. Johnson, Jr.	
1979	Subhash H. Risbud, Joseph A. Pask	
1978	Charles D. Greskovich, Joseph H. Rosolowski	
1977	Marcus B. Borom, Robert H. Doremus, Anna M. Turkalo	
1976	David E. Carlson	
1975	Anthony G. Evans, M. Linzer	
1974	Stephen C. Carniglia	
1973	O.S. Narayanaswamy	
1972	Robert L. Coble	
1971	Sheldon M. Wiederhorn	
1970	Robert E. Jech, Dennis W. Readey	
1969	Norman M. Tallan, Walter C. Tripp, Robert W. Vest	
1968	Orson L. Anderson, Naohiro Soga	
1967	Edmund M. Passmore, Richard M. Spriggs, Thomas Vasilos	
1966	Robert H. Insley, Virgil J. Barczak	
1965	Robert J. Stokes, Choh Hsien Li	
1964	Samuel S. Kistler	
1963	Leonard G. Grossman, Richard M. Fulrath	
1962	Robert Scheuplein, Peter Gibbs	
1961	Frederick P. Knudsen	
1960	Stanley D. Stookey	
1959	Arnulf Muan	
1958	Robert Gardon	
1957	R.B. Sosman	
1956	None given	
1955	None given	
1954	W.D. Kingery, J.F. Wygant	

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History of Winners

Date Elevated:	Name(s)	Awarded for:
1953	Floyd A. Hummel	
1952	None given	
1951	Ralph K. Hursh	
1950	Ivan Peyches	
1949	Flemmon P. Hall, Herbert Insley	