

**Ross Coffin Purdy Award
History of Awardees**

Date Awarded	Name(s)	Awarded for:
2025	Maxim Varenik, Elad Gaver, Ellen Wachtel, David Ehre, Sergey Khodorov & Igor Lubomirsky, Boyuan Xu, Junying Li, Prahla K. Routh & Anatoly I. Frenkel, Yue Qi	"Lead-free Zr-doped ceria ceramics with low permittivity displaying giant electrostriction" which was published in <i>Nature Communications</i> ; 14, Article number: 7371 (2023).
2025	Saisai Zhu, Jinpeng Zhu, Songbo Ye, Kaijun Yang, Mingliang Li, Hailong Wang, Jilin He	"High-entropy rare earth titanates with low thermal conductivity designed by lattice distortion" which was published in the <i>Journal of the American Ceramic Society</i> ; Volume 106, Issue 10; October 2023; Pages 6279-6291
2024	Francesco Baino, Giulia Magnaterra, Elisa Fiume, Alessandro Schiavi, Luciana-Patricia Tofan, Martin Schwentenwein, Enrica Verné	"Digital light processing stereolithography of hydroxyapatite scaffolds with bone-like architecture, permeability, and mechanical properties"; <i>The Journal of the American Ceramic Society</i> . 2022 Mar;105(3):1648-57
2023	Alex C. Hannon, Shuchi Vaishnav, Oliver L. G. Alderman, Paul A. Bingham	"The structure of sodium silicate glass from neutron diffraction and modeling of oxygen-oxygen correlations"; <i>Journal of the American Ceramic Society</i> ; 2021, 104, 6155-6171
2022	Kurt Terrani, Brian Jolly, Michael Trammell	"3D printing of high-purity silicon carbide", <i>Journal of the American Ceramic Society</i> ; 2020, 103(3) 1575-1581
2021	Beilin Ye, Tongqi Wen, Kehan Huang, Cai Zhuang Wang, Yanhui Chu	"First principles study, fabrication, and characterization of (Hf _{0.2} Zr _{0.2} Ta _{0.2} Nb _{0.2} Ti _{0.2})C high entropy ceramic" <i>Journal of the American Ceramic Society</i> , 2019 107(7) 4344-4352
2020	Fei Li, Dabin Lin, Zibin Chen, Zhenxiang Cheng, Jianli Wang, ChunChun Li, Zhuo Xu, Qianwei Huang, Xiaozhou Liao, Long-Qing Chen, Thomas R. Shrout, Shujun Zhang	"Ultrahigh piezoelectricity in ferroelectric ceramics by design", <i>Nature Materials</i> , 17 (2018) 349-354
2019	Wei Ji, Barnaby Parker, Simone Falco, Jinyong Zhang, Zhengyi Fu, Richard Todd	Ultra-fast firing: Effect of heating rate on sintering of 3YSZ, with and without an electric field, <i>Journal of the European Ceramic Society</i> 2017; Volume: 37, Issue: 6; 2547-2551
2018	Nikolai Tsvetkov, Qiyang Lu, Lixin Sun, Ethan J. Crumlin and Bilge Yildiz	Improved chemical and electrochemical stability of pervskite oxides with less reducible cations at the surface <i>Nature Materials</i> vol 15 pages 1010-1016 (2016)
2017	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 <i>Science</i> 2015 • VOL 349 Issue 6254
2016	Prabeer Barpanda, Gosuke Oyama, Shin-ichi Nishimura, Sai-Cheong Chung, Atsuo Yamada	A 3.8-V earth-abundant sodium battery electrode, <i>Nature Communications</i> , 5: 4358, 2014
2015	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, <i>Journal of the American Ceramic Society</i> , 96 (6) 1724-1734 (2013)
2014	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, <i>MRS Bulletin</i> , 37, 261-270 (2012)
2013	Michael Naguib, Olha Mashtalir, Joshua Carle, Volker Presser, Jun Lu, Lars Hultman, Yury Gogotsi, and Michel W. Barsoum	Two-Dimensional Transition Metal Carbides, <i>ACS Nano</i> , Vol. 6, No. 2., 1322-1331 (2012)
2012	Not Awarded for 2012	
2011	Daniele Pergolesi, Emiliana Fabbri, Alessandra D'Epifanio, Elisabetta Di Bartolomeo, Antonello Tebano, Simone Sanna, Silvia Licoccia,	High proton conduction in grain-boundary-free yttrium-doped barium zirconate films grown by pulsed laser deposition, <i>Nature Materials</i> , 9 (2010) 846-852
2010	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 _{0.1} Ce _{0.7} Y _{0.2} -xYb _x O _{3-δ} , 2 October 2009 Vol. 326 <i>SCIENCE</i> , pp. 126-129.
2009	Yong Qin, Xudong Wang, & Zhong Lin Wang	Microfibre-nanowire hybrid structure for energy scavenging, <i>Nature</i> , Vol 451, 14 February 2008, pg 809-814.

**Ross Coffin Purdy Award
History of Awardees**

Date Awarded	Name(s)	Awarded for:
2008	Yukio Sato, Takahisa Yamamoto, Yuichi Ikuhara	Atomic Structures and Electrical Properties of ZnO Grain Boundaries, <i>J. Am. Ceram. Soc.</i> , 90 [2] (2007) 337.
2007	Lorenz Holzer, Beat Münch, Markus Wegmann, Philippe Gasser, Robert J. Flatt	FIB-Nanotomography of Particulate Systems—Part I: Particle Shape and Topology of Interfaces, <i>J. Am. Ceram. Soc.</i> , 89 [8] 2577–2585 (2006).
2006	Chuanping Li and Mufit Akinc	Role of Bound Water on the Viscosity of Nanometric Alumina Suspensions, <i>J. Am. Ceram. Soc.</i> , 88[6] 1448-1454 (2005).
2005	Xin Guo, Wilfried Sigle and Joachim Maier	Blocking Grain Boundaries in Yttria-Doped and Undoped Ceria Ceramics of High Purity, <i>J. Am. Ceram. Soc.</i> , 86[1]77-87(2003).
2004	Andrew D'Souza and Carlo G. Pantano	Hydroxylation and Dehydroxylation Behavior of Silica Glass Fracture Surfaces, <i>J. Am. Ceram. Soc.</i> , 85 [9], 1499-1504 - (2002).
2003	Dawn Bonnell and Sergei Kalinin	Scanning Impedance Microscopy of Electroactive Interfaces Applied Physics Letters, 78 [9] 1306-1308 - (2001).
2002	William W. Mullins*	
2002	Gregory S. Rohrer	
2001	Yet-Ming Chiang and Harold Ackler	Effect of Initial Microstructure on Final Intergranular Phase Distribution in Liquid-Phase Sintered Ceramics, <i>J. AM. Ceram. Soc.</i> 82[1]183-89 (1999)
2000	David S. Wilkinson	Creep Mechanisms in Multiphase Ceramic Materials, <i>J. AM. Ceram Soc.</i> 81 [2] 275-99 (1998)
1999	S. K. Lee, S. Wuttiphon and B.R. Lawn	Role of Microstructure in Hertzian Contact Damage in Silicon Nitride: I, Mechanical Characterization
1998	Martin P. Harmer and Laura C. Stearns	Particle-Inhibited Grain Growth in Al ₂ O ₃ -SiC: Parts I and II
1997	Peter Greil	Active Filler-Controlled Pyrolysis of Pre ceramic Polymers
1996	Hans J. Schmutzler, Michael M. Antony, and Kenneth H. Sandhage	A Novel Reaction Path to BaTiO ₃ 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 ₂ O ₃ -Bi ₂ O ₃ 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 _c 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.	

**Ross Coffin Purdy Award
History of Awardees**

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