

SIPS 2023, in Honor of Nobel Laureate, Prof. Stanley Whittingham

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SIPS



**POEPPELMEIER
INTERNATIONAL
SYMPOSIUM
on
Solid State Chemistry**

27 Nov - 1 Dec 2023, Hyatt's Dreams Playa Bonita, Panama

CURRICULUM VITAE – KENNETH R. POEPPELMEIER

PERSONAL Born 1949; St. Louis, Missouri

PROFESSIONAL ADDRESS

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EDUCATION

Iowa State University, Ph.D. Inorganic Chemistry, 1974–78
University of Missouri (Columbia), B.S. Chemistry, 1967–71

EXPERIENCE

Charles E. and Emma H. Morrison Professor of Chemistry, Northwestern University, 2010–present
NAISE Fellow, Northwestern University - Chemical Sciences and Engineering Division,
Argonne National Laboratory, 2019–present
Director, Northwestern University - Center for Catalysis and Surface Science, 2012–2020
Associate Division Director for Science, Chemical Sciences and Engineering Division,
Argonne National Laboratory, 2010–2020
Professor of Chemistry, Northwestern University, 1988–2010
President, Chicago Catalysis Club, 2003–2004
Associate Director, Northwestern University - Science and Technology Center for
Superconductivity, 1989–2000
Dow Professor of Chemistry, Northwestern University, 1992–1994

Chairman-elect - Solid State Subdivision of the Division of Inorganic Chemistry, American Chemical Society, 1987–88

Chairman - Solid State Subdivision of the Division of Inorganic Chemistry, American Chemical Society, 1988–89

Associate Professor of Chemistry, Northwestern University, 1984–1988

Senior Staff Chemist, Exxon Research and Engineering Company Corporate Research – Science Laboratories, 1984

Staff Chemist, Exxon Research and Engineering Company Corporate Research – Science Laboratories, 1981–84

Senior Chemist, Exxon Research and Engineering Company Corporate Research – Science Laboratories, 1980–81

Research Chemist, Exxon Research and Engineering Company Corporate Research – Science Laboratories, 1978–80

Graduate Student Fellowship, Iowa State University Department of Chemistry, 1976–78

Graduate Student Scholarship, Iowa State University Department of Chemistry, 1975–76

Graduate Student, Research/Teaching Assistant, Iowa State University Department of Chemistry, 1974–75

Instructor, Samoa College – United States Peace Corps Apia, Western Samoa, 1971–74

AWARDS

National Science Council of Taiwan Lecturer (1991)

Dow Professor of Chemistry (1992–1994)

AAAS Fellow, the American Association for the Advancement of Science (1993)

JSPS Fellow, Japan Society for the Promotion of Science (1997)

Natural Science Foundation of China Lecturer (1999)

National Science Foundation Creativity Extension Award (2000)

Institut Universitaire de France Professor (2003)

Chemistry Week in China Lecturer (2004)

Lecturer in Solid State Chemistry, China (2005)

Visitantes Distinguidos, Universidad Complutense Madrid (2008)

Charles E. and Emma H. Morrison Professor of Chemistry (2010)

Visiting Professor, Chinese Academy of Sciences (2011)

20 years of Service and Dedication to Inorganic Chemistry (2013)

Elected foreign member of Spanish National Academy: Real Academia de Ciencia, Exactas, Fisicas y Naturales (2017)

Elected Honorary Member of the Royal Society of Chemistry of Spain (RSEQ) (2018)

TianShan Award Xinjiang Uygur Autonomous Region of China (2021)

PROFESSIONAL ACTIVITIES

- Organizer and Chairman of 1987 Chicago Great Lakes Regional ACS Symposium on *Synthesis and Processing of Advanced Solid State Materials* with Co-Chairman William Olson, Signal Research Center.
- Organizer and Chairman of 1987 New Orleans National ACS Symposium on Solid State *Chemistry of Heterogeneous Oxide Catalysis, Including New Microporous Solids* with Co-Chairman Stephen Wilson, Union Carbide Corporation.
- Member, Search Committee for Editor of New ACS Journal in Materials Chemistry
- Inorganic Exam Committee, ACS Division of Chemical Education's Examination Institute (1989).
- Vice-Chair of the Gordon Conference on Solid State Chemistry (1994) and Chair of First European Gordon Conference on Solid State Chemistry (1995).
- Organizer and Chairman of 1995 Spring Meeting Materials Research Society Symposium on *Environmental Chemistry* with co-chairman Kenneth Voss, Engelhard Corporation.
- Member (1995–1996) and Chair (1996–1998) of the Intense Pulsed Neutron Source (IPNS) Program Advisory Committee, Argonne National Laboratory.
- Organizer and Chairman of 2002 Spring Meeting Materials Research Society Symposium on *Perovskite Materials* with co-chairs Renata Wentzcovitch, University of Minneapolis and Alexandra Navrotsky, University of California (Davis).
- Organizer and Chairman of 2004 4th International Conference on Inorganic Materials with co-chairmen Gustaaf Van Tendeloo, University of Antwerp and Mas Subramanian, DuPont.
- Organizer and Chairman of 2004 Philadelphia National ACS Symposium on *Homogeneous and Heterogeneous Oxidation Catalysis* with Co-Chairman Mahdi M. Abu-Omar, Purdue University.

- Editorial Board Chemistry of Materials (1990–95).
- Expert Analyst for CHEMtracts (1990–2000).
- Associate Editor, Inorganic Chemistry (1993–2013)

- Editorial Board Journal of Alloys and Compounds (1994–2010).
- Editorial Board Solid State Sciences (2000–2015).
- Editorial Board Solid State Chemistry (2000–present).
- Senior Editor, Comprehensive Inorganic Chemistry II (published 2013).
- Editorial Board Science China Materials, Chinese Academy of Science (2014–present)
- Co-Editor for Structure and Bonding also author of the chapter titled, “Bonding at Oxide surfaces” (2014).

- Consultant for Exxon Chemicals (1985–86).

- Consultant for Air Products and Chemicals, Inc. (1985–2000).
- Consultant for Shell (1989).
- Consultant for FMC Corporation, Lithium Division (1992–93).
- Consultant for Advanced Nano Products Co., Ltd (ANP) (2010–2011).
- Scientific Advisory Committee for the World Premier International Research Center Initiative (WPI Program Japan) on Institute for Integrated Cell-Material Sciences Kyoto University (2010–present).
- Advisory Committee of European Center SOPRANO on Functional Electronic Metal Oxides (2007–2012).
- Board Member of Max Planck Institute, Dresden (2015–present)

PROFESSIONAL MEMBERSHIPS

- The American Chemical Society – Solid State Subdivision
- Materials Research Society
- The Catalysis Society – Catalysis Club of Chicago
- American Association for the Advancement of Science

PUBLICATIONS

Poeppelmeier Group Publications page.

<http://chemgroups.northwestern.edu/poeppelemeier/publications.html>

1. "Miscibility in the Systems Sodium Iodide–Trisodium Bismuthide and Sodium Iodide–Trisodium Antimonide," J. D. Corbett, J. F. Rounsaville, and K. R. Poeppelmeier, *Inorg. Chem.*, **10**, 1830–1832 (1971).
2. "Metal–Metal Bonding in Reduced Scandium Halides, Synthesis and Crystal Structure of Scandium Monochloride," K. R. Poeppelmeier and J. D. Corbett, *Inorg. Chem.*, **16**, 294–297 (1977).
3. "Metal–Metal Bonding in Reduced Scandium Halides. Synthesis and Characterization of Heptascandium Decachloride (Sc_7Cl_{10}). A Novel Metal-Chain Structure," K. R. Poeppelmeier and J. D. Corbett, *Inorg. Chem.*, **16**, 1107–1111 (1977).

4. "Metal–Metal Bonded Clusters in Transition Metal Groups III and IV. The Synthesis and Structure of Three M_6X_{12} -Type Clusters for Scandium and Zirconium," J. D. Corbett, R. L. Daake, K. R. Poeppelmeier, and D. H. Guthrie, *J. Am. Chem. Soc.*, **100**, 652–654 (1978).
5. "Cluster Condensation Reactions. Synthesis and Structure of Pentascandium Octachloride (Sc_5Cl_8). An Infinite Chain Structure Derived by Cluster Condensation," K. R. Poeppelmeier and J. D. Corbett, *J. Am. Chem. Soc.*, **100**, 5039–5044 (1978).
6. "Study of the Crystal Structures and Nonstoichiometry in the System $Cs_3Sc_2Cl_9 - CsScCl_3$," K. R. Poeppelmeier, J. D. Corbett, T. P. McMullen, D. R. Torgeson, and R. G. Barnes, *Inorg. Chem.*, **19**, 129–134 (1980).
7. "The Structure of $Ba_3W_2O_9$; An Example of Face-Shared Octahedra with Tungsten(VI)," K. R. Poeppelmeier, A. J. Jacobson, and J. M. Longo, *Mat. Res. Bull.*, **3**, 339–345 (1980).
8. "Growth of the High Temperature, High Pressure Polymorph of Rh_2O_3 by Chemical Transport with HCl, K. R. Poeppelmeier and G. B. Ansell, *J. Crystal Growth*, **51**, 587–588 (1981).
9. "The Preparation and Characterization of $Ba_3Te_2O_9$; A New Oxide Structure," A. J. Jacobson, J. C. Scanlon, K. R. Poeppelmeier, J. M. Longo, and D. E. Cox, *Mat. Res. Bull.*, **16**, 359–367 (1981).
10. "Structure of Calcium Manganese Oxide ($Ca_2Mn_3O_8$)," G. B. Ansell, M. A. Modrick, J. M. Longo, K. R. Poeppelmeier, and H. S. Horowitz, *Acta Crystallogr.*, **B38**, 1795–1797 (1982).
11. "CaMnO_{2.5} and Ca₂MnO_{3.5}: New Oxygen-Defect Perovskite-Type Oxides," K. R. Poeppelmeier, M. E. Leonowicz, and J. M. Longo, *J. Solid State Chem.*, **44**, 89–98 (1982).
12. "Synthesis and Structure of Sc_7Cl_{12} and Zr_6Cl_{15} ," J. D. Corbett, K. R. Poeppelmeier, and R. L. Daake, *Z. Anorg. Allg. Chem.*, **491**, 51–59 (1982).

13. "Structure Determination of CaMnO₃ and CaMnO_{2.5} by X-Ray and Neutron Methods," K. R. Poeppelmeier, M. E. Leonowicz, J. C. Scanlon, J. M. Longo, and W. B. Yelon, *J. Solid State Chem.*, **45**, 71–79 (1982).
14. "Three New Ordering Schemes for Oxygen Vacancies in CaMnO_{3-x}: Superlattices Based on Square-Pyramidal Coordination of Mn³⁺," A. Reller, D. A. Jefferson, J. M. Thomas, R. A. Beyerlein, and K. R. Poeppelmeier, *J. Chem. Soc., Chem. Commun.*, 1378–1380 (1982).
15. "Cesium Scandium(II) Trichloride," K. R. Poeppelmeier and J. D. Corbett, *Inorganic Synthesis*, Vol. 22, 23–25 (1983).
16. "Low Temperature Preparation of Oxygen-Defect Calcium Manganese Oxides," R. A. Beyerlein, K. R. Poeppelmeier, and J. M. Longo, 10th Intern. Symp. Reactivity of Solids, p. 403–404, Dijon (1984).
17. "Interstitial Atoms in Metal–Metal Bonded Arrays, The Synthesis and Characterization of Sc₇Cl₁₀C₂. Comparison with the Interstitial Free Sc₇Cl₁₀," S.-J. Hwu, J. D. Corbett, and K. R. Poeppelmeier, *J. Solid State Chem.*, **57**, 43–58 (1985).
18. "Structure Determination of Ca₂MnO₄ and Ca₂MnO_{3.5} by X-Ray and Neutron Methods," M. E. Leonowicz, K. R. Poeppelmeier, and J. M. Longo, *J. Solid State Chem.*, **59**, 71–80 (1985).
19. "The Structural Interrelationship Between the Three Polymorphs of Rh₂O₃ and Rh₂S₃, Rh₂Se₃ and Ir₂S₃," K. R. Poeppelmeier, J. M. Newsam, and J. M. Brown, *J. Solid State Chem.*, **60**, 68–73 (1985).
20. "Oxide Solid Solutions Derived from Homogeneous Carbonate Precursors: The CaO–MnO Solid Solution," K. R. Poeppelmeier, H. S. Horowitz, and J. M. Longo, *J. LessCommon Met.*, **116**, 219–227 (1986).
21. "High-Tc Superconductivity in Regions of Possible Compound Formation: Y_{2-x}Ba_xCuO_{4-x/2+δ} and Y_{2-x}Ba_{1+x}Cu₂O_{6-x/2+δ}," S.-J. Hwu, S. N. Song, J. Thiel, K. R. Poeppelmeier, J. B. Ketterson, and A. J. Freeman, *Phys. Rev. B*, **35**, 7119–7121 (1987).
22. "Subsolidus Compatibilities in the Y₂O₃–BaO–CuO System via Diamagnetic Susceptibility," S.-J. Hwu, S. N. Song, J. B. Ketterson, T. O. Mason, and K. R. Poeppelmeier, *J. Am. Ceram. Soc.*, **70**(7), C165–C167 (1987).

23. "Sinter-Forged $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$," Q. Robinson, P. Georgopoulos, D. Lynn Johnson, H. O. Marcy, C. R. Kannewurf, S.-J. Hwu, T. J. Marks, K. R. Poeppelmeier, S. N. Song, and J. B. Ketterson, *Adv. Ceram. Mat.*, 2, 380–387 (1987).
24. "Order–Disorder in $\text{YBa}_2\text{Cu}_3\text{O}_7$," L. D. Marks, J. P. Zhang, S.-J. Hwu, and K. R. Poeppelmeier, *J. Solid State Chem.*, 69, 189–195 (1987).
25. "High T_c Y–Ba–Cu–O thin Films Prepared by DC Magnetron Sputtering," B. Y. Jin, S. J. Lee, S.N. Song, S.-J. Hwu, J. Thiel, K. R. Poeppelmeier, and J. B. Ketterson, *Adv. Ceram. Mat.*, 2, 436–443 (1987).
26. "High T_c Superconductivity in Y–Ba–Cu–O System," S. N. Song, S.-J. Hwu, F. L. Du, K. R. Poeppelmeier, T. O. Mason, and J. B. Ketterson, *Adv. Ceram. Mat.*, 2, 480 (1987).
27. "950 °C Subsolidus Phase Diagram for Y_2O_3 –BaO–CuO System in Air," G. Wang, S.-J. Hwu, S. N. Song, J. B. Ketterson, L. D. Marks, K. R. Poeppelmeier, and T. O. Mason, *Adv. Ceram. Mat.*, 2, 313–326 (1987).
28. "Synthesis of Lithium Dialuminate by Salt Imbibition," K. R. Poeppelmeier and S.-J. Hwu, *Inorg. Chem.*, 26, 3297–3302 (1987).
29. "Energy Gap and Korringa Constant in the High Temperature Superconductor in $\text{La}_{1.83}\text{Sr}_{0.17}\text{CuO}_4$ determined by NMR," M. Lee, M. Yudkowsky, W. P. Halperin, J. Thiel, S.J. Hwu, and K. R. Poeppelmeier, *Phys. Rev. B.*, 36, 2378–2381 (1987).
30. "Oxide Ion Vacancies, Valence Electrons and Superconductivity in Mixed Metal Oxides," J. Thiel, S. N. Song, J. B. Ketterson, and K. R. Poeppelmeier, *ACS Symposium Series*, 351, 173–180 (1987).
31. "Spin-Lattice Relaxation in the Normal and Superconducting States of a High T_c Superconductor: $\text{La}_{1.83}\text{Sr}_{0.17}\text{CuO}_4$," M. Lee, M. Yudkowsky, W. P. Halperin, J. Thiel, S.J. Hwu, and K. R. Poeppelmeier, *Jpn. J. App. Phys.*, 26, 1019–1020 (1987).
32. "Magnetic Properties of the High T_c Y–Ba–Cu–O System," S. N. Song, S.-J. Hwu, K.

- R. Poeppelmeier, T. O. Mason, and J. B. Ketterson, *Jpn. J. App. Phys.*, **26**, 1039–1040 (1987).
33. "Microwave Study of High Tc Superconductor $\text{La}_{1.8}\text{Sr}_{0.2}\text{CuO}_4$," M. Poirier, G. Quirion, K. R. Poeppelmeier, and J. P. Thiel, *Phys. Rev. B*, **36**, 3906–3908 (1987).
 34. "Preparation of Y–Ba–Cu–O Thin Films on MgO by DC Magnetron Sputtering from a Stoichiometric $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Target," S. J. Lee, E. D. Rippert, B. Y. Jin, S. N. Song, S.J. Hwu, K. R. Poeppelmeier, and J. B. Ketterson, *Appl. Phys. Lett.*, **51**, 1194–1196 (1987).
 35. "Solid State Phase Chemistry in the Superconducting Systems: Y–Ba–Cu–O and La–Sr–Cu–O," J. Hahn, T. O. Mason, S.-J. Hwu, and K. R. Poeppelmeier, *Chemtronics*, **2**, 126–129 (1987).
 36. "Magnetization of Sinter-Forged $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$," S. N. Song, Q. Robinson, S.-J. Hwu, D. L. Johnson, K. R. Poeppelmeier, and J. B. Ketterson, *Appl. Phys. Lett.*, **51**, 1376–1378 (1987).
 37. "Thermogravimetric Reduction and Reoxidation Studies of Perovskite-Type Oxides," *XVI North American Thermal Analysis Society Conference Proceedings*, Washington, D.C. (1987).
 38. "HREM of Superstructures in High Temperature Superconductors," L. D. Marks, C. Tsurata, J. Thiel, and K. R. Poeppelmeier, Proc. 45th EMSA, Baltimore, Ed. G. W. Bailey (San Francisco Press, CA, 1987) p. 56–57.
 39. "The Connection Between B Cation Site Disorder and Oxygen Non-Stoichiometry in the Perovskite $\text{Ba}_2\text{Bi}_{2-x}\text{La}_x\text{O}_{6-y}$," R. A. Beyerlein, A. J. Jacobson, and K. R. Poeppelmeier, *J. Chem. Soc., Chem. Commun.*, 225–226 (1988).
 40. "Cation Replacement in $\alpha\text{-LiAlO}_2$," K. R. Poeppelmeier and D. O. Kipp, *Inorg. Chem.*, **27**, 766–767 (1988).
 41. "Microwave Absorption of High Tc Superconductor $\text{YBa}_2\text{Cu}_3\text{O}_7$," M. Poirier, G. Quirion, K.R. Poeppelmeier, and J. P. Thiel, *J. Appl. Phys.*, **63**, 1646–1650 (1988).
 42. "Isoelectronic Analogs of the High-Temperature Oxide Superconductor," J. P. Thiel, S. N. Song, J. B. Ketterson, and K. R. Poeppelmeier, IUPAC: Chemistry of Oxide

- Superconductors, Ed. C. N. R. Rao (Blackwell Scientific Publications, London, 1988). p. 123–129.
43. "A New Layered Copper Oxide: LaSrCuAlO₅," J. B. Wiley, L. M. Markham, J. T. Vaughey, T. J. McCarthy, M. Sabat, S.-J. Hwu, S. N. Song, J. B. Ketterson, and K. R. Poeppelmeier, *ACS Symposium Series*, 377, 304–314 (1988).
 44. "Synthesis of High Surface Area α -LiAlO₂," K. R. Poeppelmeier, C. K. Chiang, and D. O. Kipp, *Inorg. Chem.*, 27, 4523–4524 (1988).
 45. "Effects of Isoelectronic Substitution on the Superconductivity in YBa₂Cu₃O_{7- δ} ," S. N. Song, J. Thiel, K. R. Poeppelmeier, and J. B. Ketterson, *Bull. Am. Phys. Soc.*, 33(3), 329–329 (1988).
 46. "Ultrasonic Velocity Anomalies in Superconducting Sinter-Forged YBa₂Cu₃O_{7- δ} ," Z. Zhao, S. Adenwalla, A. Moreau, J. B. Ketterson, Q. Robinson, D. L. Johnson, S. J. Hwu, K. R. Poeppelmeier, M. F. Xu, Y. Hong, R. F. Wiegert, M. Levy, and B. K. Sarma, *Phys. Rev. B.*, 39, 721–724 (1989).
 47. "Ultrasonic Attenuation Measurements in Sinter-Forged YBa₂Cu₃O_{7- δ} ," M.-F. Xu, D. Bein, R. F. Wiegert, B. K. Sarma, M. Levy, Z. Zhao, S. Adenwalla, A. Moreau, Q. Robinson, D. L. Johnson, S. J. Hwu, K. R. Poeppelmeier, and J. B. Ketterson, *Phys. Rev. B.*, 39, 843–846 (1989).
 48. "Elastic Constant Anomalies in Sinter-Forged High- T_c Superconductor YBa₂Cu₃O_{7- δ} ," Z. Zhao, S. Adenwalla, A. Moreau, J. B. Ketterson, Q. Robinson, D. L. Johnson, S.-J. Hwu, K. R. Poeppelmeier, M.-F. Xu, Y. Hong, M. Levy, and B. K. Sarma, *J. LessCommon Met.*, 149, 451–454 (1989).
 49. "Copper-Rich Planar Defects in Gd-substituted Superconductors," H. Shibahara, S.-J. Hwu, L. D. Marks, and K. R. Poeppelmeier, *J. Solid State Chem.*, 79, 194–204 (1989).
 50. "Low Temperature Synthesis of Oxygen Deficient Perovskites," J. B. Wiley and K. R. Poeppelmeier in Perovskite: A Structure of Great Interest to Geophysics and Materials Science, Geophysical Monograph 45, A. Navrotsky and D. J. Weidner, Eds.; Amer. Geophysical Union, Washington, D.C., 1989, p. 105–110.

51. "Partial Bi–Sr–Cu–O Subsolidus Diagram at 800 °C With and Without Lithium Carbonate," J. A. Saggio, K. Sujata, J. Han, S. J. Hwu, K. R. Poeppelmeier, and T. O. Mason, *J. Am. Ceram. Soc.*, 72(5), 849–853 (1989).
52. "Microwave Absorption of Aligned Crystalline Grains of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$," M. Poirier, G. Quirion, B. Quirion, F. D'Orazio, J. P. Thiel, W. P. Halperin, and K. R. Poeppelmeier, *J. Appl. Phys.*, 66(3), 1261–1264 (1989).
53. "Solid Solution in the LiAlO_2 – LiCrO_2 Ternary Oxide System," K. R. Poeppelmeier and S. H. Thong, *J. Less-Common Met.*, 156, 291–297 (1989).
54. "Nickel/Lanthanum Ordering in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$," J. P. Thiel and K. R. Poeppelmeier, *Mol. Cryst. Liq. Cryst.*, 184, 291–295 (1990).
55. "LaSrCuGaO₅: A New Brownmillerite-Related Mixed Metal Copper Oxide," J. T. Vaughey, R. Shumaker, S. N. Song, J. B. Ketterson, and K. R. Poeppelmeier, *Mol. Cryst. Liq. Cryst.*, 184, 335–342 (1990).
56. "LaSrCuAlO₅: A New Oxygen-Deficient Perovskite Structure," J. B. Wiley, M. Sabat, S.-J. Hwu, K. R. Poeppelmeier, A. Reller, and T. Williams, *J. Solid State Chem.*, 87, 250–260 (1990).
57. "Korringa Behavior for Cu(II) in $\text{YBa}_2\text{Cu}_3\text{O}_{6.98}$," Y.-Q. Song, M. Lee, N. Tea, F. D'Orazio, S. Bhattacharja, W. P. Halperin, J. Thiel, K. R. Poeppelmeier, U. Welp, G. W. Crabtree, and M. M. Fang, *Physica B*, 165 & 166, 1301–1302 (1990).
58. "The Synthesis, Structure and Properties of LaSrCuGaO₅," J. T. Vaughey, J. B. Wiley, and K. R. Poeppelmeier, *Z. Anorg. Allg. Chem.*, 598/599, 327–338 (1991).
59. "Structural Diversity in Oxygen-Deficient Perovskites," J. T. Vaughey and K. R. Poeppelmeier, Conference on the Chemistry of Electronic Ceramic Materials, NIST, Special Publication 804, p. 419–425 (1991).
60. "La₂CuSnO₆: A New Perovskite-Related Compound with an Unusual Arrangement of B Cations," M. T. Anderson and K. R. Poeppelmeier, *Chem. Mater.*, 3, 476–482 (1991).

61. "A New Series of Mixed-Metal Cuprates in the T' Structure: $\text{Nd}_{2-x-y}\text{AxCe}_y\text{CuO}_{4-\delta}$ (A^{II} = Mg and Ca)," S. M. Wang, J. D. Carpenter, M. V. Deaton, S.-J Hwu, J. T. Vaughey, K. R. Poeppelmeier, S. N. Song, and J. B. Ketterson, Proceedings of Second World Congress on Superconductivity, Houston, Texas, *Prog. High Temp. Super.*, 28, 239–246 (1991).
62. "Two Electronically Distinct Copper Sites in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_{4-\delta}$ Compounds for $0.10 \leq x \leq 0.20$," M. A. Kennard, Y. Song, K. R. Poeppelmeier, and W. P. Halperin, *Chem. Mater.*, 3, 672–677 (1991).
63. "Synthesis and Structure of a New Family of Cuprate Superconductors: $\text{LnSr}_2\text{Cu}_2\text{GaO}_7$," J. T. Vaughey, J. P. Thiel, E. F. Hasty, D. A. Groenke, C. L. Stern, K. R. Poeppelmeier, B. Dabrowski, D. G. Hinks, and A. W. Mitchell, *Chem. Mater.*, 3(5), 935–940 (1991).
64. Comments on "Time-Dependent Structural Phenomena at Room Temperature in Quenched $\text{YBa}_2\text{Cu}_3\text{O}_{6.41}$," K. R. Poeppelmeier, *Chemtracts*, 3, 4–6 (1991).
65. "Reduction Chemistry of Platinum Group Metal Perovskites," J. B. Wiley and K. R. Poeppelmeier, *Mat. Res. Bull.*, 26, 1201–1210 (1991).
66. "New Family of Planar Cuprate Superconductors: Effect of Nonmagnetic Chains and Planes," K. R. Poeppelmeier, J. P. Thiel, J. T. Vaughey, M. T. Anderson, D. A. Groenke, C. L. Stern, B. Dabrowski, D. G. Hinks, and A. W. Mitchell, Proceedings of the M²S Conference, Kanazawa, Japan, *Physica C.*, 185–189, 525–526 (1991).
67. "Local Symmetry of Copper Sites in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$," Y.-Q. Song, Mark A. Kennard, M. Lee, K. R. Poeppelmeier, and W. P. Halperin, *Phys. Rev. B*, 44(13), 7159–7162 (1991).
68. "Structural Investigation of Oxygen-Deficient Perovskite $\text{CaMnO}_{2.75}$," C. K. Chiang and K. R. Poeppelmeier, *Mat. Lett.* 12, 102–108 (1991).
69. Comments on "Superconductivity in Layered Structures of Rare-Earth Carbide Halides," K. R. Poeppelmeier, *Chemtracts*, 3, 341–343 (1991).
70. "Comparison of Pt/KL Catalysts Prepared by Ion Exchange or Incipient Wetness," D. J. Ostgard, L. Kustov, K. R. Poeppelmeier, and W. M. H. Sachtler, *J. Catal.*, 133, 342–357 (1992).

71. "Characterization of the $\text{Li}_{1-x}\text{H}_x\text{AlO}_2$ System; $0.00 \leq x \leq 0.90$," D. C. Tomczak, S. H. Thong, and K. R. Poeppelmeier, *Catal. Lett.*, **12**, 139–146 (1992).
72. "Cation Coordination and Oxygen Vacancies in Mixed Oxide Perovskites," J. T. Vaughey, E. F. Hasty, and K. R. Poeppelmeier, *Solid State Ion.*, **53–56**, 573–577 (1992).
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