

PETER WESLEY STEPHENS

Date of Birth: 1/30/51

Place of Birth: Evanston, Illinois USA

EDUCATION:

1973-1978: Graduate student, Department of Physics, MIT. Ph.D. Thesis Title:
"Investigation of Condensation in a Supersonic He Beam: The He Dimer and Magic
Number Effects in Larger Clusters."

1969-1973: Undergraduate in Department of Mathematics, University of California at
Berkeley. AB degree summa cum laude, honors program in Mathematics.

PROFESSIONAL EXPERIENCE:

2005-present: Member, Commission on Powder Diffraction, International Union of
Crystallography

2005-2006: Chair, Executive Committee of National Synchrotron Light Source Users'
Organization.

2005-2006: Director of the Graduate Program, Department of Physics & Astronomy,
State University of New York at Stony Brook

1997-Present: Member, International Center for Diffraction Data

1997-2003: Director of the Graduate Program, Department of Physics & Astronomy,
State University of New York at Stony Brook

1996-7: Chair, Executive Committee of National Synchrotron Light Source Users'
Organization

1992-present: Professor, Department of Physics, SUNY, Stony Brook.

1986-92: Associate Professor, Department of Physics, SUNY, Stony Brook.

1988-1989: Foreign Associate Professor of Physics, Faculty of Science, Tohoku
University, Sendai, Japan.

1980-1986: Assistant Professor, Department of Physics, SUNY, Stony Brook.

1978-1980: Research Associate, MIT.

HONORS & AWARDS:

1999: Fellow of the American Physical Society.

1986: Elected Most Outstanding Teacher by Physics Department graduating class.

1978-1980: Chaim Weizmann Postdoctoral Fellow, MIT.

1973-1976: Karl Taylor Compton Fellow, Department of Physics, MIT.

1973: Elected to membership, Phi Beta Kappa

RESEARCH INTERESTS: X-ray and neutron scattering spectroscopy of condensed matter. Synchrotron radiation. Fullerene materials. Powder x-ray diffraction analysis, especially *ab initio* structure solutions and biologically related problems. Structural and magnetic phase transitions. Kinetics of ordering and phase transitions. Surfaces. Quasicrystals.

CONFERENCE PROGRAM COMMITTEES within the past ten years:

March 1999: Organized Focused sessions on Fullerenes and Nanotubes for the Centennial Meeting of the American Physical Society, Atlanta, GA.

July 2000: Materials Special Interest Group chairman, American Crystallographic Association, organizing sessions at annual meeting, St. Paul, MN.

December 2002: Organizing committee, Pharmaceutical Powder X-ray Diffraction II, sponsored by International Centre for Diffraction Data, Newtowne Square, PA.

May 2003: Frontiers in Powder Diffraction, workshop at the 2003 National Synchrotron Light Source Users' Meeting, Upton, NY

September 2003: Organizing committee, Structure Determination from Powder Data, Stara Lesna, Slovak Republic.

February 2004: Organizing committee, Pharmaceutical Powder X-ray Diffraction III, sponsored by International Centre for Diffraction Data, Hilton Head Island, SC.

May 2004: Pharmaceutical Applications of Synchrotron Radiation, workshop at the 2004 National Synchrotron Light Source Users' Meeting, Upton, NY

May 2005: Program chair, National Synchrotron Light Source Users' Meeting, Upton, NY

February 2006: Organizing committee, Pharmaceutical Powder X-ray Diffraction VI, Barcelona, Spain.

March 2006: Organized a session of invited talks, "Pharmaceutical Materials Science" at American Physical Society meeting, Denver.

PUBLICATIONS (Except as noted by *, all are in refereed journals.)

1. P.W. Stephens, P.A. Heiney, R.J. Birgeneau, and P.M. Horn, "X-ray Scattering Study of the Commensurate-Incommensurate Transition of Monolayer Krypton on Graphite", *Phys. Rev. Lett.* **43**, 47 (1979).
2. E.M. Hammonds, P. Heiney, P.W. Stephens, R.J. Birgeneau, and P. Horn, "Structure of Liquid and Solid Monolayer Xenon on Graphite", *J. Phys. C* **13**, L301 (1980).
3. R.J. Birgeneau, E.M. Hammonds, P. Heiney, P.W. Stephens, and P. Horn, "Structure and Transitions of Monolayer Krypton and Xenon on Graphite", in *Proceedings of the International Conference on Ordering in Two Dimensions*, S. Sinha, ed. (Plenum, NY 1980).*
4. P.W. Stephens, P.A. Heiney, R.J. Birgeneau, P.M. Horn, J. Stoltenberg, and O.E. Vilches, "X-ray and Heat Capacity Study of Molecular Oxygen Adsorbed on Graphite", *Phys. Rev. Lett.* **45**, 1959 (1980).
5. R.J. Birgeneau, G.S. Brown, P.M. Horn, D.E. Moncton, and P.W. Stephens, "Synchrotron X-ray Study of Monolayer Krypton Melting", *J. Phys. C* **14**, L49 (1981).
6. D.E. Moncton, P.W. Stephens, R.J. Birgeneau, P.M. Horn, and G.S. Brown, "Synchrotron Radiation Study of the Commensurate-Incommensurate Transition of Krypton on Graphite", *Phys. Rev. Lett.* **46**, 1533 (1981); response to comment *ibid.* **49**, 1679.
7. P.A. Heiney, R.J. Birgeneau, G.S. Brown, P.M. Horn, D.E. Moncton, and P.W. Stephens, "The Freezing Transition of Monolayer Xenon on Graphite", *Phys. Rev. Lett.* **48**, 104 (1982).
8. P.A. Heiney, P.W. Stephens, S.G.J. Mochrie, J. Akimitsu, R.J. Birgeneau, and P.M. Horn, "X-ray Study of Molecular Oxygen Adsorbed on Graphite", *Surface Science* **125**, 539 (1983).
9. P.W. Stephens, R.J. Birgeneau, C.F. Majkrzak, and G. Shirane, "Neutron Scattering Study of Solid Oxygen", *Phys. Rev. B* **28**, 452 (1983).
10. P.A. Heiney, P.W. Stephens, R.J. Birgeneau, P.M. Horn, and D.E. Moncton, "An X-ray Scattering Study of the Structure and Freezing Transition of Monolayer Xenon on Graphite", *Phys. Rev. B* **28**, 6416 (1983).
11. P.W. Stephens and J.G. King, "Experimental Investigation of Small Helium Clusters: Magic Numbers and the Helium Dimer", *Phys. Rev. Lett.* **51**, 1538 (1983).
12. P.W. Stephens, P.A. Heiney, R.J. Birgeneau, P.M. Horn, D.E. Moncton, and G.S. Brown, "High Resolution X-ray Study of the Commensurate-Incommensurate Transition of Monolayer Kr on Graphite", *Phys. Rev. B* **29**, 3512 (1984).
13. P.W. Stephens, "Magnetic Form Factor of the O₂ Molecule", *Phys. Rev. B* **31**, 4491 (1985).
14. P.A. Bancel, P.A. Heiney, P.W. Stephens, A.I. Goldman, and P.M. Horn, "Structure of Rapidly Quenched Al-Mn", *Phys. Rev. Lett.* **54**, 2422 (1985).

15. P.W. Stephens, and M.F. Huth, "Adsorption of CCl_4 on Graphite", *Phys. Rev. B* **32**, 1661 (1985).
16. P.W. Stephens and C.J. Majkrzak, "Magnetic Structure and Dynamics in the Alpha and Beta Phases of Solid Oxygen", *Phys. Rev. B* **33**, 1 (1986).
17. P.W. Stephens, A.I. Goldman, P.A. Heiney, and P.A. Bancel, "Commensurate-Incommensurate Transition of Kr-Xe Mixtures on Graphite", *Phys. Rev. B* **33**, 655 (1986).
18. P.W. Stephens and A.I. Goldman, "Sharp Diffraction Maxima from an Icosahedral Glass", *Phys. Rev. Lett.* **56**, 1168 (1986); Erratum, *Phys. Rev. Lett.* **57**, 2331.
19. M. Nielsen, J. Als-Nielsen, J. Bohr, J.P. McTague, D.E. Moncton, and P.W. Stephens, "Melting Studies of Argon on ZYX Graphite", *Phys. Rev. B* **35**, 1419 (1987).
20. P.A. Heiney, P.A. Bancel, A.I. Goldman, P.W. Stephens, "EXAFS Study of Al-Mn-Ru-Si Icosahedral Alloys", *Phys. Rev. B* **34**, 6746 (1986).
21. P.W. Stephens and A.I. Goldman, "Response to a comment by P.J. Steinhardt", *Phys. Rev. Lett.* **57**, 2770 (1986).
22. L. Mihaly, K.-B. Lee, P.W. Stephens, "X-ray Diffraction Study of the Metastable Charge Density Wave State of $\text{K}_{0.3}\text{MoO}_3$ ", *Phys. Rev. B* **36**, 1793 (1987).
23. A.I. Goldman and P.W. Stephens, "Anisotropic Packing and Diffraction Peak Shifts in Icosahedral Glasses", *Phys. Rev. B* **37**, 2826 (1988).
24. C.A. Guryan, K.-B. Lee, P.W. Stephens, A.I. Goldman, J.Z. Larese, P.A. Heiney, E. Fontes, "Combined Extended X-ray Absorption Fine Structure and Diffraction Study of Kr Adsorbed on Graphite", *Phys. Rev. B* **37**, 3461 (1988).
25. C.A. Guryan, P.W. Stephens, A.I. Goldman, F.W. Gayle, "Structure of Icosahedral Clusters in Cubic $\text{Al}_{5.6}\text{Li}_{2.9}\text{Cu}$ ", *Phys. Rev. B* **37**, 8495 (1988).
26. P.J. Eng, L.A. Krebs, K.-B. Lee, P.W. Stephens, S. Woronick, K.-G. Huang, M.A. Kaye, J. Zegenhagen, W.M. Gibson, D.A. Hansen, J.B. Hudson, J.C. Phillips, "The SUNY X-21B Beamline at NSLS: Spectroscopy and Versatile Surface Science Facility", *Nucl. Instrum. & Methods in Phys. Research* **A266** 210 (1988).*
27. A.I. Goldman, C.A. Guryan, P.W. Stephens, J.M. Parsey, Jr., G. Aeppli, H.S. Chen, "Diffuse Scattering from the Icosahedral Phase Alloys", *Phys. Rev. Lett.* **61**, 1962 (1988).
28. P. Stephens, "The Icosahedral Glass Model," in *Aperiodicity and Order*, Vol. 3, M. Jaric and D. Gratias, editors, (Academic Press, Boston, 1989).*
29. C.A. Guryan, A.I. Goldman, P.W. Stephens, K. Hiraga, A.P. Tsai, A. Inoue, and T. Masumoto, "Al-Cu-Ru: An Icosahedral Alloy Without Phason Disorder", *Phys. Rev. Lett.* **62**, 2409 (1989).

30. A.I. Goldman, J.E. Shield, C.A. Guryan, and P.W. Stephens, "Order and Disorder in Face-Centered Icosahedral Alloys", in *Proceedings of the 25th Anniversary Adriatico Research Conference on Quasicrystals*, edited by M. Jaric and S. Lundquist (World Scientific, Singapore, 1990).*
31. P.W. Stephens and A.I. Goldman, "Structure of Quasicrystals", *Scientific American* **264** no. 4, 44 (April, 1991).*
32. P.W. Stephens, L. Mihaly, P.L. Lee, R.L. Whetten, S.-M. Huang, R. Kaner, F. Diederich, and K. Holczer, "Structure of Single-Phase Superconducting K_3C_{60} ", *Nature* **351**, 632 (1991).
33. P.W. Stephens, P.J. Eng, and T. Tse, "Kinetics of Ordering with Random Impurities: Pb on Ni(001)", in *Surface X-ray and Neutron Scattering*, H. Zabel and I.K. Robinson, editors (Springer-Verlag, Berlin, 1992).*
34. P.W. Stephens, L. Mihaly, J.B. Wiley, S.-M. Huang, R.B. Kaner, F. Diederich, R.L. Whetten, and K. Holczer, "Structure of Rb:C₆₀ Compounds", *Phys. Rev. B* **45**, 543 (1992).
35. P.W. Stephens, D. Cox, J.W. Lauher, L. Mihaly, J.B. Wiley, P.-M. Allemand, A. Hirsch, K. Holczer, Q. Li, J.D. Thompson, and F. Wudl, "Lattice Structure of the Fullerene Ferromagnet, TDAE-C₆₀", *Nature* **355**, 331 (1992).
36. P.W. Stephens, "Fullerene Superconductors: Back to the Drawing Board", News and Views column in *Nature*, **356**, 383 (1992).*
37. C. Kendziora, L. Forro, D. Mandrus, J. Hartge, P. Stephens, L. Mihaly, R. Reeder, D. Moecher, M. Rivers, and S. Sutton, "Composition, structure, and electrical properties of $Bi_2Sr_2Ca_{1-y}Y_yCu_2O_8$: A single crystal study", *Phys. Rev. B* **45**, 13025 (1992).
38. G. Sparn, J.D. Thompson, P.M. Allemand, Q. Li, F. Wudl, K. Holczer, and P.W. Stephens, "Pressure Dependence of Magnetism in C₆₀TDAE", *Solid State Communications* **82**, 779 (1992).
39. P.J. Eng, P.W. Stephens, and T. Tse, "Anomalous power-law ordering kinetics of Pb on Ni(001)", *Phys. Rev. B* **46**, 5024 (1992).
40. S. Ikeda, K. Shibata, Y. Nakai, and P.W. Stephens, "Incoherent Neutron Scattering Measurements on KDP," *J. Phys. Soc. Japan* **61**, 2619 (1992).
41. P.W. Stephens, P.J. Eng, and T. Tse, "Construction and Performance of a Bent Crystal X-ray Monochromator," *Rev. Sci. Instrum.* **64**, 374 (1993).
42. T. Yildirim, J.E. Fischer, A.B. Harris, P.W. Stephens, D. Liu, L. Brard, R.M. Strongin, and A.B. Smith III, "Orientational Phase Transition in Na_xC_{60} ($1 < x < 3$)," *Phys. Rev. Lett.* **71**, 1383 (1993).
43. P.W. Stephens, editor, *The Physics and Chemistry of Fullerenes* (World Scientific, Singapore, 1993).*

44. M. de Boissieu, P. Stephens, M. Boudard, and C. Janot, "Is the Al-Pd-Mn Icosahedral Phase Centrosymmetrical?" *J. Phys.: Condens. Matter* **6**, 363 (1994).
45. D. Koller, M.C. Martin, P.W. Stephens, and L. Mihaly, "A chamber for the *in-situ* IR measurement of C₆₀ thin films while doping with alkali metals," *Review of Scientific Instruments* **65**, 760 (1994).
46. G. Faigel, G. Bortel, G. Oszlanyi, S. Pekker, M. Tegze, P.W. Stephens, and D. Liu, "Low Temperature Phase Transition in C₆₀-n-pentane," *Phys. Rev. B* **49**, 9186 (1994).
47. M.C. Martin, D. Koller, X. Du, P.W. Stephens, and L. Mihaly, "Insulating and Conducting Phases of RbC₆₀," *Phys. Rev. B* **49**, 10818 (1994).
48. O. Chauvet, G. Oszlanyi, L. Forro, P.W. Stephens, M. Tegze, G. Faigel, and A. Janossy, "Quasi one-dimensional Electronic Structure in Orthorhombic Rb₁C₆₀," *Phys. Rev. Letters* **72**, 2721 (1994).
49. A.N. Lommen, P.A. Heiney, G.B.M. Vaughan, P.W. Stephens, D. Liu, D. Li, A.L. Smith, A.R. McGhie, R.M. Strongin, L. Brard, and A.B. Smith, III, "Structure and Phase Transition of the 6,5-Annulene Isomer of C₆₁H₂," *Phys. Rev. B* **49**, 12572 (1994).
50. A.R. McGhie, J.E. Fischer, P.W. Stephens, R.L. Cappelletti, D.A. Neumann, W.H. Mueller, H. Mohn, and H.U. ter Meer, "Phase Transitions in Solid C₇₀: Supercooling, Metastable Phases and Impurity Effect," *Phys. Rev. B* **49**, 12614 (1994).
51. M. deBoissieu, P. Stephens, M. Boudard, C. Janot, D.L. Chapman, and M. Audier, "Disorder and Complexity in the Atomic Structure of the Perfect Icosahedral Alloy AlPdMn," *Phys. Rev. Letters* **72**, 3538 (1994).
52. T. Tse, P.W. Stephens, and P.J. Eng, "Epitaxy and Domain Growth of Pb on Ni(001)," *J. Physics: Condensed Matter* **6**, 6111 (1994).
53. P.W. Stephens, G. Bortel, G. Faigel, M. Tegze, A. Janossy, S. Pekker, G. Oszlanyi, and L. Forro, "Polymeric Fullerene Chains in Rb₁C₆₀ and K₁C₆₀," *Nature* **370**, 636 (1994).
54. M. deBoissieu, P. Stephens, M. Boudard, C. Janot, D.L. Chapman, and M. Audier, "Anomalous X-ray Diffraction Study of the AlPdMn Icosahedral Phase," *J. Physics: Condens. Matter* **6**, 10725 (1994).
55. D.S. Bohle, B.J. Conklin, D. Cox, S.K. Madsen, S. Paulson, P.W. Stephens, and G.T. Yee, "Structural and Spectroscopic Studies of β -Hematin (the Heme Coordination Polymer in Malaria Pigment)," in *Inorganic and Organometallic Polymers II*, edited by P. Wisian-Neilson, H.R. Allcock, and K.J. Wynne, (American Chemical Society, Washington, DC, 1994).*
56. T. Yilidrim, L. Barbedette, K. Kniaz, J.E. Fischer, C.L. Lin, N. Bykovetz, P.W. Stephens, P.E. Sulewski, and S.C. Erwin, "Fullerene Superconductors: Effects of Molecular Orientation

and Valence," in *Science and Technology of Fullerene Materials*, edited by P. Bernier, T.W. Ebbesen, D.S. Bethune, R.M. Metzger, L.Y. Chiang and J.W. Mintmire, (Materials Research Society, Pittsburgh, 1994).*

57. D. Koller, M.C. Martin, P.W. Stephens, L. Mihaly, S. Pekker, A. Janossy, O. Chauvet, and L. Forro, "Polymeric Alkali Fullerides are Stable in Air," *Appl. Phys. Letters* **66** 1015, (1994).
58. T. Yilidrim, J.E. Fischer, R. Dinnebier, P.W. Stephens, and C.L. Lin, "Fulleride Superconductors and Orientational Order: T_C vs. Lattice Constant in $\text{Na}_2\text{Rb}_x\text{Cs}_{1-x}\text{C}_{60}$," *Solid State Commun.* **93**, 269 (1995).
59. R.E. Dinnebier, P.W. Stephens, J.K. Carter, A.N. Lommen, P.A. Heiney, A.R. McGhie, L. Brard, and A.B. Smith III, "X-ray Powder Diffraction Structure of Triclinic $\text{C}_{60}\text{Br}_{24}(\text{Br}_2)_2$," *J. Appl. Crystallog.* **28**, 327 (1995).
60. G. Oszlányi, G. Bortel, G. Faigel, M. Tegze, L. Gránásy, S. Pekker, P.W. Stephens, G. Bendele, R. Dinnebier, G. Mihály, A. Jánossy, O. Chauvet, and L. Forró, "Dimerization in K_1C_{60} and Rb_1C_{60} ," *Phys. Rev. B* **51**, 12228 (1995).
61. G. Faigel, G. Bortel, M. Tegze, L. Gránásy, S. Pekker, G. Oszlányi, O. Chauvet, G. Baumgartner, L. Forro, P.W. Stephens, G. Mihály, and A. Jánossy, "Distribution of K Ions in Intermediate K_1C_{60} ," *Phys. Rev. B* **52**, 3199 (1995).
62. M. Kunz, R. Dinnebier, L.K. Cheng, E.M. McCarron, D.E. Cox, J.B. Parise, M. Gehrke, J. Calabrese, P.W. Stephens, T. Vogt, and R. Papoular, "Cs(TiAs)O₅ and Cs(TiP)O₅: A Disordered Parent Structure of ABOCO_4 Compounds," *J. Solid State Chemistry* **120**, 299 (1995).
63. J.E. Fischer, G. Bendele, R. Dinnebier, P.W. Stephens, C.L. Lin, N. Bykovetz, and Q. Zhu, "Structural Analysis of Fullerene and Fulleride Solids from Synchrotron X-ray Powder Diffraction," *J. Phys. Chem. Solids* **56**, 1445 (1995).
64. P.W. Stephens, "X-ray Studies of A_1C_{60} Phases," in *Physics and Chemistry of Fullerenes and Derivatives*, edited by H. Kuzmany, J. Fink, M. Mehring, and S. Roth, (World Scientific, Singapore, 1995).*
65. R.E. Dinnebier, P.W. Stephens, S. Wies, and W. Eysel, "Structures and Phase Transitions of $\text{Bi}_2\text{CdO}_2[\text{GeO}_4]$," *J. Solid State Chemistry* **123**, 371 (1996).
66. W.C. Elliott, P.F. Miceli, T. Tse, and P.W. Stephens, "Orientation Dependence of Homoepitaxy: an in situ x-ray scattering study of Ag," *Physica B* **221** 65 (1996).
67. R. L. Whetten, J. T. Khoury, M. M. Alvarez, S. Murthy, I. Vezmar, Z. L. Wang, P. W. Stephens, C. L. Cleveland, W. D. Luedtke, U. Landman, "Nanocrystal Gold Molecules," *Adv. Mater.* **8** 428-433 (1996).

68. G. Oszlanyi, G. Bortel, G. Faigel, L. Granasy, L. Forro, G.M. Bendele, and P.W. Stephens, "Single C-C bond in $(C_{60})_2^{2-}$," *Phys. Review B* **54**, 11849 (1996).
69. T. Yildirim, L. Barbedette, J.E. Fischer, G. Bendele, P.W. Stephens, C.L. Lin, C. Goze, F. Rachdi, J. Robert, P. Petit, and T.T.M. Palstra, "Synthesis and Properties of Mixed Alkali-Alkaline Earth Fullerides," *Phys. Rev. B* **54**, 11981 (1996).
70. W.C. Elliott, P.F. Miceli, T. Tse, and P.W. Stephens, "Temperature and Orientation Dependence of Kinetic Roughening During Homoepitaxy: A Quantitative X-ray Scattering Study of Ag," *Physical Review B* **54**, 17938 (1996).
71. R.E. Dinnebier, F. Olbrich, S. van Smaalen, and P.W. Stephens, "The *Ab Initio* Structure Determination of two Polymorphs of Cyclopentadienylrubidium in a Single Powder Pattern," *Acta Crystallog. B* **53**, 153 (1997).
72. C.L. Cleveland, U. Landman, M. Shafigullin, P.W. Stephens, and R.L. Whetten, "Structural Evolution of Larger Gold Clusters," *Zeitschrift für Physik D* **40**, 503 (1997).
73. C.A. Kuntscher, G.M. Bendele, and P.W. Stephens, "Alkali-metal Stoichiometry and structure of K_4C_{60} and Rb_4C_{60} ," *Physical Review B* **55**, R3366 (1997).
74. D. Scott Bohle, R.E. Dinnebier, S.K. Madsen, and P.W. Stephens, "Characterization of the Products of the Heme Detoxification Pathway in Malarial Late Trophozoites by X-ray Diffraction," *J. Biological Chemistry* **272**, 713 (1997).
75. K. Prassides, K. Vavakis, K. Kordatos, K. Tanigaki, G.M. Bendele, and P.W. Stephens, "Loss of Cubic Symmetry in Low Temperature Na_2RbC_{60} ," *J. Amer. Chem. Soc.* **119**, 834 (1997).
76. R.E. Dinnebier, M. Pink, J. Sieler, and P.W. Stephens, "Novel Alkali Metal Coordination in Phenoxides: Powder Diffraction Results on C_6H_5OM [M = K, Rb, Cs], *Inorganic Chemistry* **36**, 3398 (1997).
77. D. Balzar, P.W. Stephens, H. Ledbetter, J. Li, and M.L. Dunn, "Synchrotron X-ray Diffraction Study of the Surface Layer in Poled Ceramic $BaTiO_3$," *Materials Research Society Symp. Proc.* **453**, 715 (1997).*
78. D. Balzar, P.W. Stephens, and H. Ledbetter, "Synchrotron X-ray Diffraction Line Profile," *Fizika A* **6**, 41 (1997).
79. A.M. Rao, P.C. Eklund, U.D. Venkateswaran, J. Tucker, M.A. Duncan, G.M. Bendele, P.W. Stephens, J.L. Hodeau, L. Marques, M. Núñez-regueiro, I.O. Bashkin, E.G. Ponyatovsky, and A.P. Morovsky, "Properties of C_{60} polymerized under high pressure and temperature," *Appl. Physics A* **64**, 231 (1997).

80. C.L. Cleveland, U. Landman, T.G. Schaaff, M.N. Shafiqullin, P.W. Stephens, and R.L. Whetten, "Structural Evolution of Smaller Gold Nanocrystals: The Truncated Decahedral Motif," *Phys. Rev. Letters* **79**, 1873 (1997).
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82. H.P. Beck, M. Schramm, R. Haberkorn, R. Dinnebier, and P.W. Stephens, "Synthesis and Crystal Structure of $\text{Rb}_6\text{Pb}_5\text{Cl}_{16}$," *Z. Anorg. Allg. Chem.* **624**, 393 (1998).
83. G.M. Bendele, P.W. Stephens, K. Prassides, K. Vavekis, K. Kordatos, and K. Tanigaki, "Effect of charge state on polymeric bonding geometry: The ground state of $\text{Na}_2\text{RbC}_{60}$," *Phys. Rev. Letters* **80**, 736 (1998).
84. G.M. Bendele, P.W. Stephens, and J.E. Fischer, "Octahedral Cations in Rb_3C_{60} : Reconciliation of conflicting evidence from different probes," *Europhysics Letters*. **41**, 553 (1998).
85. R.E. Dinnebier, M. Pink, J. Sieler, P. Norby, and P.W. Stephens, "Powder Structure Solutions of the Compounds Potassium Phenoxide – Phenol: $\text{C}_6\text{H}_5\text{OK} \cdot x \text{C}_6\text{H}_5\text{OH}$, $x=[2,3]$," *Inorganic Chemistry* **37**, 2552 (1998).
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89. P.W. Stephens, "Phenomenological Model of Anisotropic Peak Broadening in Powder Diffraction," *Journal of Applied Crystallography*, **32**, 281-289 (1999).
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