

Publications from 1986 - 2004

1. W. S. Rees, Jr., D. M. Schubert, C. B. Knobler, and M. F. Hawthorne, "Synthesis and X-ray Crystal Structure of a Novel Bimetallic *bis*(η^5 -dicarbollide)-Aluminum Sandwich Complex," *J. Am. Chem. Soc.*, **1986**, *108*, 5367.
2. W. S. Rees, Jr., D. M. Schubert, C. B. Knobler, and M. F. Hawthorne, "Synthesis and Molecular Structure of a Novel *bis*(η^5 -dicarbollide)-Silicon Sandwich Compound: *commo*-3,3'-Si(3,1,2-SiC₂B₉H₁₁)₂," *J. Am. Chem. Soc.*, **1986**, *108*, 5369.
3. W. S. Rees, Jr., "Discoveries Pertaining to the Chemistry of Certain Novel Main Group Heteroelement Carborane Clusters," University Microfilms Int'l., **1986**.
4. D. M. Schubert, C. B. Knobler, W. S. Rees, Jr., and M. F. Hawthorne, "Synthesis and Molecular Structure of a Novel Aluminacarborane, *nido*-[μ -6,9-AlEt(OEt₂)-6,9-C₂B₈H₁₀]," *Organometallics*, **1987**, *6*, 201.
5. D. M. Schubert, C. B. Knobler, W. S. Rees, Jr., and M. F. Hawthorne, "Synthesis and X-ray Structure of a Novel *bis*(*nido*-carboranyl)-Aluminate Complex, [Al(η^2 -6,9-C₂B₈H₁₀)₂]" *Organometallics*, **1987**, *6*, 203.
6. W. S. Rees, Jr., D. M. Schubert, C. B. Knobler, and M. F. Hawthorne, "Synthesis and X-ray Crystal Structure of a Novel Bimetallic *bis*(η^5 -dicarbollide)-Aluminum Sandwich Complex: Addition and Correction," *J. Am. Chem. Soc.*, **1987**, *109*, 2861.
7. D. M. Schubert, W. S. Rees, Jr., C. B. Knobler, and M. F. Hawthorne, "Studies of Metallacarborane Derivatives Containing Aluminum and Silicon," *Pure Appl. Chem.*, **1987**, *59*, 869.
8. W. S. Rees, Jr. and D. Seyferth, "High Yield Synthesis of B₄C/BN Ceramic Materials by Pyrolysis of Polymeric Lewis Base Adducts of Decaborane(14)," *J. Am. Ceram. Soc.*, **1988**, *71*, C-194.
9. D. M. Schubert, W. S. Rees, Jr., C. B. Knobler, and M. F. Hawthorne, "Novel Aluminum- and Silicon-Containing Metallacarboranes," in "Ultrastructure Processing of Advanced Ceramics" J. D. Mackenzie, D. R. Ulrich, Eds., Wiley: New York, **1988**, 41 - 54.
10. W. S. Rees, Jr. and D. Seyferth, "Phosphorus-Containing Derivatives of Decaborane(14) as Precursors to Boron-Containing Materials," *Ceram. Eng. Sci. Proc.*, **1988**, *9*, 1009.

11. A. Lightfoot, W. S. Rees, Jr., and J. S. Haggerty, "Boron-Containing Ceramic Materials Derived From Polymeric Precursors: Material Characteristics," *Ceram. Eng. Sci. Proc.*, **1988**, *9*, 1021.
12. W. S. Rees, Jr. and D. Seyferth, "The Preceramic Polymer Route to Boron - Containing Ceramic Materials," in "Better Ceramics Through Chemistry III," C. J. Brinker, D. E. Clark, D. R. Ulrich, Eds., *Materials Research Society Symposium Proceedings, Volume 121*; Materials Research Society: Pittsburgh, Pennsylvania, **1988**, 449 - 454.
13. D. Seyferth, W. S. Rees, Jr., J. S. Haggerty, and A. Lightfoot, "Preparation of Boron-Containing Ceramic Materials by Pyrolysis of the Decaborane(14)-Derived $[-B_{10}H_{12} \cdot Ph_2POPPh_2]_x$ Polymer," *Chem. of Materials*, **1989**, *1*, 45.
14. M. F. Hawthorne, D. M. Schubert, M. J. Manning, M. A. Bandman, W. S. Rees, Jr., and C. B. Knobler, "The Synthesis and Structural Characterization of Carborane Derivatives Containing Main Group and f-Block Elements," *Phosphorus Sulfur, and Silicon*, **1989**, *41*, 253.
15. W. S. Rees Jr. and D. Seyferth, "Use of Monomeric $B_{10}H_{12} \cdot 2L$ Complexes and $B_{10}H_{10}^{2-}$ Salts as Binders for Ceramic Materials," *J. Matl. Sci.*, **1989**, *24*, 4220.
16. W. S. Rees, Jr. and D. Seyferth, "Preparation, Characterization, and Pyrolysis of Decaborane (14)-Based Polymers: B_4C/BN and BN Procedures," *Ceram. Eng. Sci. Proc.*, **1989**, *10*, 837.
17. D. M. Schubert, M. A. Bandman, W. S. Rees, Jr., C. B. Knobler, P. Lu, W. Nam, and M. F. Hawthorne, "Synthesis of Group 13 Element Metallocarboranes and Related Structure-Reactivity Correlations," *Organometallics*, **1990**, *9*, 2046.
18. D. Seyferth, K. Buechner, W. S. Rees, Jr., and W. M. Davis, "1,2-Dimethyl-1,2-disila-*closo*-dodecaboran(12), das erste Silicium-Analogon eines *ortho*-Carborans," *Angew. Chem.*, **1990**, *102*, 911.
19. D. M. Schubert, W. S. Rees, Jr., C. B. Knobler, and M. F. Hawthorne, "Synthesis, Structural Characterization, and Reactivity of the Bis(η^5 -dicarbollide)silicon Sandwich Compound *commo*-3,3'-Si(3,1,2-SiC₂B₉H₁₁)₂," *Organometallics*, **1990**, *9*, 2938.
20. D. Seyferth, K. Buechner, W. S. Rees, Jr., and W. M. Davis, "1,2-Dimethyl-1,2-disila-*closo*-dodecaborane(12), the First Silicon Analog of an *ortho*-Carborane," *Angew. Chem., Intl. Ed.*, **1990**, *29*, 918 (translation of #18).
21. W. S. Rees, Jr., M. D. Hampton, S. W. Hall, and J. L. Mills, "Trimethylborane," *Inorganic Syntheses, Vol. 27*, Wiley: New York, **1990**, 339.

22. W. S. Rees, Jr. and W. Hesse, "Pre-ceramic Polymers for Aluminum Oxides," in "Chemical Perspectives of Microelectronic Materials II," L. V. Interrante, K. F. Jensen, L. H. DuBois, M. E. Gross, Eds., *Materials Research Society Symposium Proceedings, Volume 204*; Materials Research Society: Pittsburgh, Pennsylvania, **1991**, 563 - 570.
23. W. S. Rees, Jr. and D. Seyferth, "The Preparation, Characterization, and Pyrolysis of $[B_{10}H_{12} \cdot \text{diamine}]_x$ Polymers: A New Route to Boron Nitride," *Chem. of Materials*, **1991**, 3, 1106.
24. W. S. Rees, Jr., M. W. Carris, and W. Hesse, "Synthesis and X-ray Diffraction Crystal Structure of $[Ba(\text{tmhd})_2 \cdot 2 \text{NH}_3]_2$ (tmhd = 2,2,6,6-tetramethylheptane-3,5-dionate). A Novel Low Molecular Weight Barium Compound," *Inorg. Chem.*, **1991**, 30, 4479 - 4481.
25. W. S. Rees, Jr. and D. A. Moreno, "Preparation of Monomeric $Ba[O(\text{CH}_2\text{CH}_2\text{O})_n\text{CH}_3]_2$ ($n = 2, 3$), Ambient Temperature Liquid Barium Compounds," *J. Chem. Soc., Chem. Commun.*, **1991**, 1759 - 1760.
26. D. Seyferth, H. Plenio, W. S. Rees, Jr., and K. Buechner, "Silicon Ceramics With a Dash of Boron," in "Frontiers of Organosilicon Chemistry," A. R. Bassindale, P.P. Gaspar, Eds.; Proceedings of the Ninth International Symposium on Organosilicon Chemistry, Royal Society of London: Cambridge, G. B., **1991**, 15 - 27.
27. W. S. Rees, Jr. and W. Hesse, "Polymeric Routes to Aluminum Oxides," *Polymer Preprints, Volume 32, Number 3*, **1991**, 573 - 574.
28. W. S. Rees, Jr. and W. Hesse, "Control over Al_2O_3 Phase by Use of Polymer Precursors," in "Synthesis and Processing of Ceramics: Scientific Issues," W. E. Rhine, T. M. Shaw, R. J. Gottschall, Y. Chen, Eds., *Materials Research Society Symposium Proceedings, Volume 249*; Materials Research Society: Pittsburgh, Pennsylvania, **1992**, 51 - 57.
29. W. S. Rees, Jr., T. J. Anderson, D. M. Green, and E. Bretschneider, "OMVPE Growth of ZnSe Utilizing Zinc Amides as Source Compounds: Relevance to the Production of p-Type Material," in "Wide Band Gap Semiconductors," T. D. Moustakas, J. I. Pankove, Y. Hamakawa, Eds., *Materials Research Society Symposium Proceedings, Volume 242*; Materials Research Society: Pittsburgh, Pennsylvania, **1992**, 281 - 286.
30. W. S. Rees, Jr. and C. R. Caballero, "MOCVD Growth of Copper and Copper Oxide Films From *bis*(β -Diketonate) Complexes of Copper. The Role of Carrier Gas on Deposit Composition," in "Chemical Vapor Deposition of Refractory Metals and Ceramics II," T. M. Besmann, B. M. Gallois, J. M. Warren, Eds., *Materials Research Society Symposium Proceedings, Volume 250*; Materials Research Society: Pittsburgh, Pennsylvania, **1992**, 297 - 301.

31. W. S. Rees, Jr. and C. R. Caballero, "Metal - Organic Chemical Vapour Deposition (MOCVD) Growth Utilising $\text{Cu}(\text{acac})_2$ (acac = pentane-3,5-dionato) as a Source for Copper-containing Materials: Influence of Carrier Gas on Surface Morphology," *Advanced Materials for Optics and Electronics*, **1992**, 1, 59 - 64.
32. W. S. Rees, Jr., "Growth of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Thin Films on LaAlO_3 ," in "Proceedings of the Fourth Florida Microelectronics Conference," E. J. Claire, Ed.; University of South Florida, **1992**, 83 - 89.
33. W. S. Rees, Jr., C. R. Caballero, and W. Hesse, "Darstellung und Charakterisierung von β -Diketoether Komplexen mit Hauptgruppen- und Uebergangselementen: Beweise fuer inter- und intramolekulare Stabilisierung," *Angew. Chem.*, **1992**, 104, 786 - 788.
34. W. S. Rees, Jr. and K. A. Dippel, "Synthesis of β - and γ -Alkoxy and β -Dimethylamino 1- and 2- Substituted-1,3-Cyclopentadienes," *Org. Prep. Proc. Intl.*, **1992**, 24, 531 - 536.
35. W. S. Rees, Jr., D. M. Green, and W. Hesse, "Synthesis and X-ray Diffraction Crystal Structure of $\text{Zn}\{\text{N}[(\text{C}(\text{CH}_3)_3)(\text{Si}(\text{CH}_3)_3)]_2\}$. The First Solid State Characterization of a Homoleptic Zinc Amide," *Polyhedron*, **1992**, 11, 1697 - 1699.
36. W. S. Rees, Jr., K. A. Dippel, M. W. Carris, C. R. Caballero, D. A. Moreno, and W. Hesse, "New Group 2 Compounds Useful for Preparation of Thin Films of Electronic Ceramics," in "Better Ceramics Through Chemistry V," M. J. Hampden-Smith, W. G. Klemperer, C. J. Brinker, Eds., *Materials Research Society Symposium Proceedings, Volume 271*; Materials Research Society: Pittsburgh, Pennsylvania, **1992**, 127 - 134.
37. W. S. Rees, Jr., H. A. Luten, M. W. Carris, E. J. Doskocil, and V. L. Goedken, "Solid State Structures, Decomposition Pathways, and Vapor Phase By-products of $\text{Y}(\text{acac})_3$ Type OMVPE Precursors for Thin Films of Yttrium-Containing Ceramic Materials," in "Better Ceramics Through Chemistry V," M. J. Hampden-Smith, W. G. Klemperer, C. J. Brinker, Eds., *Materials Research Society Symposium Proceedings, Volume 271*; Materials Research Society: Pittsburgh, Pennsylvania, **1992**, 141 - 147.
38. W. S. Rees, Jr., Y. S. Hascicek, and L. R. Testardi, "Electronic Properties of OMVPE Grown Films of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ on 1" LaAlO_3 Substrates," in "Better Ceramics Through Chemistry V," M. J. Hampden-Smith, W. G. Klemperer, C. J. Brinker, Eds., *Materials Research Society Symposium Proceedings; Volume 271*; Materials Research Society: Pittsburgh, Pennsylvania, **1992**, 925 - 931.
39. W. S. Rees, Jr. and K. A. Dippel, "New Group 2 Organometallic Precursors to Metal Oxides," in "Ultrastructure Processing of Ceramics, Glasses, Composites, Ordered

Polymers, and Advanced Optical Materials V," L. L. Hench, J. K. West, D. R. Ulrich, Eds.; Wiley: New York, **1992**, 327 - 332.

40. W. S. Rees, Jr., C. R. Caballero, and W. Hesse, "Alkoxyalkyl-Substituted β -Diketonate Complexes of Barium and Copper: Evidence for Inter- and Intramolecular Stabilization," *Angew. Chem., Intl. Ed.*, **1992**, *31*, 735 - 737 (translation of #33).
41. W. S. Rees, Jr., D. M. Green, T. J. Anderson, E. Bretschneider, B. Pathangey, and J. Kim, "Evaluation of $\text{Zn}\{\text{N}[\text{Si}(\text{CH}_3)_3]_2\}_2$ as a p-Type Dopant in OMVPE Growth of ZnSe," *J. Electronic Materials*, **1992**, *21*, 361 - 366.
42. W. S. Rees, Jr. and D. A. Moreno, "Casting About for the Origin of Cast in $\text{Ba}(\text{OR})_2$ Complexes," in "The Spectroscopy and Structure of Molecules and Nuclei," M. A. El-Sayed, N. R. Johnson, Eds.; World Scientific: River Edge, New Jersey, **1993**, 367 - 374.
43. D. Seyferth, K. Buechner, W. S. Rees, Jr., L. Wesemann, W. M. Davis, S. S. Bukalov, L. A. Leites, H. Bock, and B. Solouki, "1,2-Dimethyl-1,2-disila-closo-dodecaborane(12), A Silicon Analog of an *ortho*-Carborane: Synthesis; X-ray Crystal Structure; NMR, Vibrational and Photoelectron Spectra; Bonding," *J. Am. Chem. Soc.*, **1993**, *115*, 3586 - 3594.
44. W. S. Rees, Jr., D. M. Green, W. Hesse, T. J. Anderson, and B. Pathangey, "Synthesis, Characterization and Evaluation of Zinc-amides as Potential Dopant Sources for ZnSe OMVPE," in "Chemical Perspectives of Microelectronic Materials III," C. R. Abernathy, C. W. Bates, Jr., D. A. Bohling, W. S. Hobson, Eds., *Materials Research Society Symposium Proceedings, Volume 282*, Materials Research Society: Pittsburgh, Pennsylvania, **1993**, 63 - 67.
45. W. S. Rees, Jr., G. Kräeuter, and V. L. Goedken, "Preparation and Characterization of Group 12 Thiolate Complexes and Evaluation of Their Potential as Precursors for II-VI Semiconductors," in "Microcrystalline Semiconductors -- Materials Science and Devices," Y. Aoyagi, L. T. Canham, P. M. Fauchet, I. Shimizu, C. C. Tsai, Eds., *Materials Research Society Symposium Proceedings, Volume 283*, Materials Research Society: Pittsburgh, Pennsylvania, **1993**, 859 - 864.
46. V. L. Goedken, L. F. Brough, and W. S. Rees, Jr., "Aspects of the Chemistry of Vinylarsenic Compounds. The Preparations of Divinylarsenic Acid, Tetravinyl-diarsine Oxide, and Tetravinyl-diarsine, and the X-Ray Crystal Structure Determination of the Helical Divinylarsenic Acid," *J. Organometallic Chem.*, **1993**, *449*, 125 - 130.
47. W. S. Rees, Jr. and A. R. Barron, "Group 2 Element and Related Compounds as Chemical Vapor Deposition Precursors for High-temperature Superconducting Metal Oxides," *Advanced Materials for Optics and Electronics*, **1993**, *2*, 271 - 288.

48. W. S. Rees, Jr. and A. R. Barron, "Group IIA β -diketonate Compounds as CVD Precursors for High T_c Superconductors," *Materials Science Forum, Volume 137 - 139*, A. Hepp, S. A. Alterovitz, J. J. Pouch, R. R. Romanofsky, Eds., **1993**, 473 - 494.
49. W. S. Rees, Jr., "Superconductors: An Overview of the Present and Potential Materials and Markets," *Ceramic Industries International*, **1993**, 22 - 26.
50. W. S. Rees, Jr. and W. Hesse, "Use of the Reaction Products of Diols and Organoaluminum Compounds as Precursors to Al_2O_3 . Control Over Ceramic Material Phase and Particle Size by Choice of Precursor Chemistry," *Polymer Preprints*, **1993**, 34, 252 - 253.
51. W. S. Rees, Jr., H. A. Luten, M. W. Carris, C. R. Caballero, W. Hesse, and V. L. Goedken, "Current Status of and Recent Results on Group 2 Source Compounds for Vapor Phase Epitaxy of Ferroelectric Thin Films," in "Ferroelectric Thin Films III," E. R. Myers, S. B. Desu, B. A. Tuttle, P. K. Larsen, Eds., *Materials Research Society Symposium Proceedings, Volume 310*; Materials Research Society: Pittsburgh, Pennsylvania, **1993**, 375.
52. D. Seyferth, K. Büchner, W. S. Rees, Jr., L. Wesemann, W. M. Davis, S. S. Bukalov, L. A. Leites, H. Bock, and B. Solouki, "1, 2-Dimethyl -1, 2- disila - closo - dodecaborane (12), A Silicon Analog of an *ortho* - Carborane: Synthesis; X-ray Crystal Structure; NMR, Vibrational and Photoelectron Spectra; Bonding: Addition and Correction," *J. Am. Chem. Soc.*, **1993**, 115, 11656.
53. A. C. Greenwald, W. S. Rees, Jr., and U. W. Lay, "MOCVD Erbium Sources," in "Rare Earth Doped Semiconductors," G. S. Pomrenke, P. B. Klein, D. W. Langer, Eds., *Materials Research Society Symposium Proceedings, Volume 301*, Materials Research Society: Pittsburgh, Pennsylvania, **1993**, 21 - 26.
54. W. S. Rees, Jr., "Alkaline Earth Metals: Inorganic Chemistry," *Encyclopedia of Inorganic Chemistry, Volume 1*, R. B. King, Ed.; John Wiley & Sons: New York, **1994**, 67 - 87.
55. J. C. Kim, W. S. Rees, Jr., and V. L. Goedken, "Syntheses of Nitridomolybdenum (V) Porphyrin Complexes and the Molecular Structure of $N\equiv Mo(TMP)$ (TMP = Tetramesitylporphyrin)," *Inorganic Chemistry*, **1994**, 33, 3191 - 3194.
56. W. S. Rees, Jr. and L. J. Chopin, "Determination of Aluminum Coordination Environments in Amorphous Al_2O_3 by Solid State NMR Spectroscopy," in "Crystallization and Related Phenomena in Amorphous Materials," M. Libera, T. E. Haynes, P. Cebe, J. E. Dickinson, Jr., Eds., *Materials Research Society Symposium Proceedings, Volume 321*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 123 - 128.

57. W. S. Rees, Jr. and O. Just, "New Zinc-*bis*(Dialkylamides) Potentially Usable as Site-selective Dopants for p-Type ZnSe," in "Gas-Phase and Surface Chemistry in Electronic Materials Processing," T. J. Mountziaris, G. R. Paz-Pujalt, F. T. J. Smith, P. R. Westmoreland, Eds., *Materials Research Society Symposium Proceedings, Volume 334*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 219 -224.
58. W. S. Rees, Jr., "Group 2 Element Chemistry and its Role in OMVPE of Electronic Ceramics," in "Metal-Organic Chemical Vapor Deposition of Electronic Ceramics," S. B. Desu, D. B. Beach, B. W. Wessels, S. Gokoglu, Eds., *Materials Research Society Symposium Proceedings, Volume 335*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 351 -362.
59. W. S. Rees, Jr. and G. Kräuter, "Processable, Chemical Routes to Binary Metal Sulfides," in "Covalent Ceramics II: Non-Oxides," A. R. Barron, G. S. Fischman, M. A. Fury, A. F. Hepp, Eds., *Materials Research Society Symposium Proceedings, Volume 327*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 3 - 14.
60. W. S. Rees, Jr. and W. Hesse, "Alucone Polymers and Their Pyrolytic Product Aluminum Oxides," in "Inorganic and Organometallic Polymers II, Advanced Materials and Intermediates" P. Wisian-Neilson, H. R. Allcock, K. J. Wynne, Eds., *American Chemical Society Symposium Proceedings, Volume 572*, American Chemical Society: Washington, D. C., **1994**, 165 - 182.
61. L. F. Brough, L. Gang, M. A. Lipkovich, T. J. Colacot, V. L. Goedken, and W. S. Rees, Jr., "Tetraalkyldiarsines as Potential Precursors for Electronic Materials: Synthesis and Characterization of Various *Iso*-Propyl Arsenic Compounds," in "Gas-Phase and Surface Chemistry in Electronic Materials Processing," T. J. Mountziaris, G. R. Paz-Pujalt, F. T. J. Smith, P. R. Westmoreland, Eds., *Materials Research Society Symposium Proceedings, Volume 334*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 213 - 217.
62. G. Kräuter, P. Favreau, B. K. Nunnally, and W. S. Rees, Jr., "Preparation and Characterization of Group 14 Element *Bis*(Thiolate) Compounds and Evaluation of Their Potential as Molecular Precursors in the Low Temperature Syntheses of Binary Metal Sulfides," in "Covalent Ceramics II: Non-Oxides," A. R. Barron, G. S. Fischman, M. A. Fury, Aloysius F. Hepp, Eds., *Materials Research Society Symposium Proceedings, Volume 327*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 41 - 46.
63. G. Kräuter, V. L. Goedken, B. Neumüller, and W. S. Rees, Jr., "Group 12 Thiolates: Syntheses, Characterization and Decomposition Pathways," in "Covalent Ceramics II: Non-Oxides," A. R. Barron, G. S. Fischman, M. A. Fury, A. F. Hepp, Eds., *Materials Research Society Symposium Proceedings, Volume 327*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 35 - 40.

64. W. S. Rees, Jr., U. W. Lay, and K. A. Dippel, "Ether- and Amine-substituted Cyclopentadienes as Ligands in Organometallic Compounds: Examples for Iron and Barium," *J. Organometallic Chem.*, **1994**, 483, 27 - 31.
65. W. S. Rees, Jr. and G. Kräuter, "New Molecular - Based Routes to Binary Main Group Metal Sulfides," *Phosphorus, Sulfur, and Silicon*, **1994**, 87, 219 - 228.
66. G. Kräuter, P. Favreau, and W. S. Rees, Jr., "Use of Lead *Bis*(butylthiolate) Compounds in a New Low-Temperature Route to Highly Crystalline Lead Sulfide: Identity and Source of Reaction Byproducts," *Chem. of Materials*, **1994**, 6, 543 - 549.
67. W. S. Rees, Jr. and G. Kräuter, "Thallium: Metallorganic Chemistry," *Encyclopedia of Inorganic Chemistry, Volume 8*, R. B. King, Ed.; John Wiley & Sons: New York, **1994**, 4142 - 4151.
68. W. S. Rees, Jr., U. W. Lay, and A. C. Greenwald, "Preparation and Evaluation of Erbium *Tris*(amide) Source Compounds for Erbium Doping of Semiconducting Materials," in "Gas-Phase and Surface Chemistry in Electronic Materials Processing," T. J. Mountziaris, G. R. Paz-Pujalt, F. T. J. Smith, P. R. Westmoreland, Eds., *Materials Research Society Symposium Proceedings; Volume 334*, Materials Research Society: Pittsburgh, Pennsylvania, **1994**, 207 - 212.
69. W. S. Rees, Jr. and M. W. Carris, "A New, Thermally Efficient Route to Crystalline BaTiO₃ From Monodispersed Rutile Powder," *Advanced Materials for Optics and Electronics*, **1994**, 4, 9 - 17.
70. W. S. Rees, Jr. and G. Kräuter, "Intra-Ring Differentiation between MS and MX in the Preparation of Electronic Materials from Metal Thiolate Precursors," *Phosphorus, Sulfur, and Silicon*, **1995**, 93 & 94, 339 - 344.
71. J. C. Kim, W. S. Rees, Jr., and V. L. Goedken, "Synthesis and Crystal Structure of an Organoimido Molybdenum (V) Porphyrin Salt, [Mo(NMe)(TPP)(H₂O)][I₃] (TPP = tetraphenylporphyrin)," *Inorganic Chemistry*, **1995**, 34, 2483 - 2486.
72. W. S. Rees, Jr., H. A. Luten and V. L. Goedken, "Organometallic Chemical Vapor Deposition: The Roles of Precursor Design and Growth Ambient in Film Properties," in "Chemical Vapor Deposition of Refractory Metals and Ceramics III," B. M. Gallois, W. Y. Lee, M. A. Pickering, Eds., *Materials Research Society Symposium Proceedings, Volume 363*, Materials Research Society: Pittsburgh, Pennsylvania, **1995**, 195 - 206.
73. W. S. Rees, Jr., "Review of Handbook of Deposition Technologies for Films and Coatings: Science, Technology and Applications," *Advanced Materials*, **1995**, 7, 96.

74. R. C. Dougherty, C. W. Bowen, T. Berger, W. S. Rees, Jr., E. K. Mellon, and B. Pulliam, "Cooperative Learning and Electronic Communication. Effects on Student Performance, Retention, and Attitudes in General Chemistry," *Journal of Chemical Education*, **1995**, 72, 793 - 797.
75. G. Kräuter and W. S. Rees, Jr., "Cadmium *bis*(Alkylthiolate) Complexes as Precursors for Cadmium Sulfide: A Mild Route to Hawleyite," *J. Materials Chemistry*, **1995**, 5, 1265 - 1267.
76. W. S. Rees, Jr. and G. Kräuter, "CVD of Other Materials," in "CVD of Nonmetals," W. S. Rees, Jr., Ed; VCH: New York, New York, **1996**, 367 - 400.
77. W. S. Rees, Jr., O. Just, H., and R. Weimann, "Initial Structural Characterization of a Lanthanoid *tris*(Agostic) Interaction," *Angew. Chem., Intl. Ed.*, **1996**, 35, 419 - 422.
78. W. S. Rees, Jr. and M. W. Carris, "*Bis*(2,2,6,6-tetramethyl-3,5-heptanedionato)copper," *Inorganic Syntheses, Volume 31*, A. Cowley, Ed.; **1996**, 286 - 288.
79. W. S. Rees, Jr. and M. W. Carris, "*Tris*(2,2,6,6-tetramethyl-3,5-heptanedionato)yttrium," *Inorganic Syntheses, Volume 31*, A. Cowley, Ed.; **1996**, 302 - 306.
80. G. Kräuter, B. Neumüller, V. Goedken, and W. S. Rees, Jr., "Mercury Thiolato Complexes: Syntheses, Crystal Structures and Decomposition Pathways," *Chem. Mater.*, **1996**, 8, 360 - 368.
81. R. D. Schluter, G. Kräuter, and W. S. Rees, Jr., "Unimolecular Precursors to Binary Metal Sulfides: Mechanistic and Structural Correlations," *Materials Research Society Symposium Proceedings, Volume 410*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 85 - 95.
82. M. B. Hursthouse, H. A. Luten, K. M. Abdul Malik, D. J. Otway, and W. S. Rees, Jr., "An Investigation into the Role of Incorporated Solvent (EtOH/H₂O) Molecules on the Structure of Group 2 Metal *bis*(β -Diketonate) complexes: Ramifications for CVD Precursors of electronic Materials," *Materials Research Society Symposium Proceedings, Volume 415*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 105 -110.
83. R. D. Schluter, H. A. Luten, and W. S. Rees, Jr. "Synthetic Characterization and Decomposition Studies of Indium Sulfide Precursors," *Materials Research Society Symposium Proceedings, Volume 410*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 97 - 101.

84. O. Just and W. S. Rees, Jr., "Erbium Tris(Amide) Compounds as Source Molecules for Rare-Earth Doping of Semiconducting Materials," *Materials Research Society Symposium Proceedings, Volume 415*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 111 - 116.
85. D. A. Gaul, O. Just, and W. S. Rees, Jr., "Zinc *bis*(Amide) Compounds Evaluated as Designed Precursors for Site-Selective P-Type Doping of ZnSe," *Materials Research Society Symposium Proceedings, Volume 415*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 117 -121.
86. H. A. Luten, D. J. Otway, and W. S. Rees, Jr., "Barium *bis*(β -Diketonate) \cdot tetraglyme Complexes as Potential CVD Precursors for Electronic Materials," *Materials Research Society Symposium Proceedings, Volume 415*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 99 -104.
87. H. A. Luten, V. L. Goedken, and W. S. Rees, Jr., "Preparation and Structural Characterization of, and Chemical Vapor Deposition Studies with, Certain Yttrium Tris(β -Diketonate) Compounds," *Advanced Materials*, **1996**, 8, *Chemical Vapor Deposition*, **1996**, 2, 149 - 161.
88. W. S. Rees, Jr., "Design of CVD Precursors," in "Proceedings of the Thirteenth International Conference on Chemical Vapor Deposition," T. M. Besmann, M. D. Allendorf, McD. Robinson and R. K. Ulrich, Eds; The Electrochemical Society: Pennington, N. J., **1996**, Volume 96-5, 225 -230.
89. R. L. Wells, A. R. Barron, W. L. Gladfelter, D. Schulz, O. I. Micic, W. E. Buhro, and W. S. Rees, Jr., "Design of Molecular Precursors for Electronic Materials," in "Research Opportunities in Photochemical Sciences," National Renewable Energy Laboratory, NREL/CP-450-21097, A. J. Nozik and S. Ronco, Eds., **1996**, 186 -194.
90. G. Kräuter and W. S. Rees, Jr., "Preparation and Characterization of Several Group 12 Element (Zn, Cd)-*Bis*(Thiolate) Complexes and Evaluation of Their Potential as Precursors for 12 - 16 Semiconducting Materials," *Journal of Materials Research*, **1996**, 11, 3005 - 3016.
91. A. Greenwald, O. Just, K. Linden, N. Hageal, and W. S. Rees, Jr., "Rare-Earth Doped Semiconductors II," in "Erbium Doped GaAs by MOCVD," Polman, A., Coffa, S., Schwartz, R., Eds., *Materials Research Society Symposium Proceedings, Volume 422*, Materials Research Society: Pittsburgh, Pennsylvania, **1996**, 63 - 68.
92. W. S. Rees, Jr., "Group 2 Element CVD Precursors: Chemistry and Delivery," in "Forum for Future Trends: Eighth Annual Dielectrics and CVD Metallization Symposium," Schumacher, **1996**, 309 - 374.
93. W. S. Rees, Jr., "Introduction" in "CVD of Nonmetals," W. S. Rees, Jr., Ed; VCH: New York, New York, **1996**, 1 - 35.

94. W. S. Rees, Jr., O. Just, H. Schumann, and R. Weimann, "Strukturelle Charakterisierung einer tris-agostischen Lanthanoid-Wechselwirkung," *Angewandte Chemie*, **1996**, *108*, 481 - 483.
95. W. S. Rees, Jr. and G. Kräuter, "Initial Preparation of a Barium Bis(oligoetherthiolate): An Intramolecularly-stabilized Precursor for the Thermally Mild Formation of BaS," *Main Group Chemistry*, **1997**, *2*, 9 - 11.
96. R. D. Schluter, G. Kräuter, and W. S. Rees, Jr., "Metal Thiolate Compounds: Processable Ceramic Precursors," *Journal of Cluster Science*, **1997**, *8*, No. 1, 123 - 154.
97. W. S. Rees, Jr., B. Obi, and D. Otway, "Precursors for Chemical Vapor Deposition of Yttrium Barium Copper Oxide," *Journal of Alloys and Compounds*, **1997**, *251*, 254 - 263.
98. H. A. Luten and W. S. Rees, Jr., "Group 2 Element Compounds: From Coordination Chemistry to Electronic Materials," *Main Group Chemistry News*, **1997**, *5*, Number 2, 4 - 16.
99. G. Kräuter, S. K. Sunny, and W. S. Rees, Jr., "A Barium-Sulfur-Phosphorous-Nitrogen Ring System: Synthesis and Crystal Structure of Ba[(SP(Ph)₂)₂N]₂·2 DME," *Polyhedron*, **1998**, *17*, 391 - 395.
100. W. S. Rees, Jr., O. Just, H. Schumann, and R. Weimann "First Structural Characterization of a Zinc-bis(dialkylamide) Compound: Zn{N[C(CH₃)₂(CH₂)₃C(CH₃)₂]}₂," *Polyhedron*, **1998**, *17*, No. 5-6, 1001 - 1004.
101. S. Flanagan, H. A. Luten, and W. S. Rees, Jr., "The Reaction of Beta-Diketones with P₄S₁₀ to Produce Novel Alkyl-Phosphorus-Sulfur Clusters," *Inorganic Chemistry*, **1998**, *37*, 6093-6095.
102. O. Just and W. S. Rees, Jr., "Precursors for Vapor Deposition of Blue Phosphors for Electroluminescent Flat Panel Displays," *Materials Research Society Symposium Proceedings, Volume 495*, Materials Research Society: Pittsburgh, Pennsylvania, **1998**, 83-93.
103. W. S. Rees, Jr., O. Just, L. Kimmerling, M. T. Morse, "How to Get Light Out of Silicon: Molecular Design of Precursors for MOCVD of Si:Er," *Proceedings of SPIE*, L. Hubert-Pfalzgraf, S. Iraj Najafi, Eds., **1998**, *3469*, 2 - 7.
104. O. Just, D. VanDerveer and W. S. Rees, Jr., "Molecular Design of Dopant Precursors for Atomic Layer Epitaxy of SrS:Ce," *Journal of Materials Chemistry*, **1999**, *9*, 249-252.

105. N. L. Pickett, O. Just, X. Li, D. VanDerveer and W. S. Rees, Jr., "Compounds Containing Gallium-Silicon Interactions: Syntheses and X-Ray Crystal Structures of *Bis*-[2(dimethylaminomethyl)phenyl]-[*tris*(trimethylsilyl)silyl]gallium, $\text{Ar}_2\text{GaSi}(\text{SiMe}_3)_3$ and Diphenyl-[*tris*(trimethylsilyl)silyl]gallium, $\text{Ph}_2\text{GaSi}(\text{SiMe}_3)_3 \cdot \text{THF}$," *Journal of Organometallic Chemistry*, **1999**, 582, 119-125.
106. B. Obi-Johnson and W. S. Rees, Jr., "Metal-Organic Chemical Vapor Deposition of Superconducting Metal Oxides," *Bull. Inst. Chem. Academia Sinica*, **1999**, 46, 59-80.
107. D. A. Moreno and W. S. Rees, Jr., "On the Trail of a Homoleptic Monomeric Barium *bis*(Alkoxide)," *Advances in Metallo-Organic Chemistry*, RBSA Publishers, India, **1999**, 417-442.
108. S. L. Castro, O. Just, W. S. Rees, Jr., "A Quadruply-Stranded Alkaline-Earth Metal-Containing Helical Catenate: Demonstration of Self-Templated Self-Assembly of a Charge Neutral Heterotopic Homodinuclear [2]Catenane," *Angewandte Chemie*, **2000**, 39, 933-935.
109. J. S. Matthews and W. S. Rees, Jr., "Group 2 Element Precursors for the Chemical Vapor Deposition of Electronic Materials," *Advances in Inorganic Chemistry*, **2000**, 50, 173-192.
110. J. S. Matthews, O. Just, B. Obi-Johnson and W. S. Rees, Jr., "Chemical Vapor Deposition of MgO from a $\text{Mg}(\beta\text{-Ketoiminate})_2$: Preparation, Characterization and Utilization of an Intramolecularly Stabilized, Highly Volatile, Thermally Robust Precursor," *Advanced Materials, CVD*, **2000**, 6, 129-132.
111. N. L. Pickett, O. Just, D. G. VanDerveer and W. S. Rees, Jr., "Reinvestigation of the Crystal Structure of *Bis*(trimethylsilyl)mercury," *Acta Crystallographica*, **2000**, Section C, 56, Part 4, 412-413.
112. O. Just, B. Obi-Johnson, J. S. Matthews, D. Levermore, T. Jones, and W. S. Rees, Jr., "Design, Synthesis and Characterization of Precursors for Chemical Vapor Deposition of Oxide-Based Electronic Materials," *Materials Research Society Symposium Proceedings*, Volume 606, Materials Research Society: Boston, Massachusetts, **2000**, 3-12.
113. D. Otway and W. S. Rees, Jr., "Group 2 Element β -Diketonate Complexes: Synthetic and Structural Investigations," *Coordination Chemistry Reviews*, **2000**, 210, 279-328.
114. W. S. Rees, Jr., O. Just, S. L. Castro, and J. S. Matthews, "Synthesis, Magnetic and Structural Characterization of the First Homoleptic Lanthanide β -Ketoiminate," *Inorganic Chemistry*, **2000**, 39, 3736-3737.

115. N. L. Pickett, O. Just, D. G. VanDerveer, W. S. Rees, Jr., "Dichloro(tetrahydrofuran-*O*)[(trimethylsilyl)amino-*N*]gallium(III)," *Acta Crystallographica*, **2000**, C56, 560-561.
116. H. Luten, O. Just and W. S. Rees, Jr., "Synthesis and Structural Characterization of a Volatile, Intramolecularly Coordinated Monomeric Homoleptic Magnesium Alkylamide," *Chemical Communications*, **2000**, 9, 735 - 736.
117. D. A. Gaul and W. S. Rees, Jr., "True Blue Inorganic Optoelectronic Devices," *Advanced Materials*, **2000**, 12, 935 - 946.
118. S. Bunge, O. Just, and W. S. Rees, Jr., "Synthesis and X-ray Crystal Structure of [$\{\text{Au}[\mu\text{-N}(\text{SiMe}_3)_2]\}_4$]: The First Example of a Base-Free Gold Amide," *Angew. Chem. Int. Ed.*, **2000**, 39, No.17, 3082-3084.
119. D. Gaul, O. Just, and W. S. Rees, Jr., "Synthesis and Characterization of a Series of Zinc bis[Alkyl(trimethylsilyl)amide] Compounds," *Inorganic Chemistry*, **2000**, 39, 5648 - 5654.
120. X. Li, V. Agarwal, M. Liu, and W. S. Rees, Jr., "Investigation of the Mechanism of Sol-gel Formation in the Sr(NO₃)₂/Citric Acid/ Ethylene Glycol System by Solution State ⁸⁷Sr Nuclear Magnetic Resonance Spectroscopy," *Journal of Materials Research*, **2000**, 15, 2393 - 2399.
121. O. Just and W. S. Rees, Jr., "Metal Amides: Versatile Dopant Precursors for Electronic Materials," *Advanced Materials for Optics and Electronics*, **2000**, 10, 213 - 221.
122. D. M. Levermore, M. Josowicz, W. S. Rees, Jr., and J. Janata, "Headspace Analysis of Engine Oil by Gas Chromatography/ Mass Spectrometry," *Analytical Chemistry*, **2001**, 73, 1361-1365.
123. S. D. Bunge, O. Just, and W. S. Rees, Jr., "Synthesis, Structural Characterization and Dynamic Behavior of Group 12 Metals Containing the Sterically Hindered Ligand [N(t-Bu)CH(t-Bu)CHN-t-Bu]^{-x}" *Polyhedron*, **2001**, 20, 823-830.
124. O. Just and W. S. Rees, Jr. "Syntheses and Single-Crystal X-ray Diffraction Examination of a Structurally Homologous Series of Tetracoordinate Heteroleptic Anionic Lanthanide Complexes: Ln{N[Si(CH₃)₂CH₂CH₂Si(CH₃)₂]}₃(μ-Cl)Li(L)₃ [Ln = Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb; (L)₃ = (THF)₃, (Et₂O)₃, (THF)₂(Et₂O)]" *Inorganic Chemistry*, **2001**, 40, 1751-1755.

125. O. Just, D. A. Gaul, and W. S. Rees, Jr., "Low-Coordinate Volatile Group 12 Amides: Syntheses and Crystal Structure Determinations of Dimeric $\{M\{N[Si(CH_3)_2CH_2CH_2Si(CH_3)_2]\}_2\}_2$; M = Zn, Cd and Monomeric $Hg\{N[Si(CH_3)_2CH_2CH_2Si(CH_3)_2]\}_2$," *Polyhedron*, **2001**, 20, 815-821.
126. O. Just, and W. S. Rees, Jr., "Ligand Design for Stabilization of Group 2 Element Compounds by Intramolecular Coordination," *Phosphorus, Sulfur, and Silicon*, **2001**, 168, 215-225.
127. J. Concepcion, O. Just, A. M. Leiva, B. Loeb, W. S. Rees, Jr. "Trans ruthenium (ii) complexes with NH bridged tetradentate symmetric, asymmetric polypyridyl ligands," *Inorg. Chem.*, **2002**, 41(23), 5937-5939.
128. E. Mays, D. Hess and W. S. Rees, Jr., "Chemical Vapor Deposition of Zirconium Tin Titanate: A Dielectric Material for Potential Microelectronics Applications," *Proc. Int. Conf. Chem. Vapor Depos.*, (16th: 2003: Paris, France). EUROCVI 14, M. D. Allendorf, F. Maury, F. Teyssandier, Eds., **2003**, 2003-08, 855.
129. R. M. Kriegel, W. S. Rees, Jr. and M. Weck "Design and Realization of a Macromolecular Viscosity Control System" *Macromolecules*, **2004**, 37, 6644-6649.
130. E. L. Mays, D. W. Hess and W. S. Rees, Jr., "Deposition and Characterization of Zirconium Tin Titanate Thin Films as a Potential High-*k* Material for Electronic Devices," *J. Cryst. Growth.*, **2004**, 261, 309-315.
131. E. L. Mays and W. S. Rees, Jr., "Development of Inorganic Materials for Electronic Applications: Achieving Desired Material Properties through the Symbiosis of Chemistry, Process, and Equipment Design," *Proc. Int. Symp. Inorganic Materials: Recent Advances*, (2002: Mumbai, India). RAIM 02, D. Bahadur, S. Vitta, O. Prakash, Eds., **2004**, 1-8.
132. S. Ganesan, Z. C. Feng, D. Mehta, K. Shalini, E. J. Wornyo, W. M. Nemeth, W. S. Rees, Jr., J. Nause, I. Ferguson, "Optical Properties of Bulk, Epitaxial ZnO for Waveguide Applications," *Mater. Res. Soc. Symp. Proc.*, **2004**, 299, Z8.10.1-Z8.10.6.
133. J. F. Eichler, O. Just and W. S. Rees, Jr., "A General Route to Tin-nitrogen Heterocubanes," *Phosphorus, Sulfur, and Silicon*, **2004**, 179(4-5), 715-726.
134. J. F. Eichler, O. Just and W. S. Rees, Jr., "The Design and Synthesis of Heterometallic Alkoxide-amides and Their Application in the MOCVD of Zirconium-tin-titanate (ZTT)," *J. Materials Chemistry*, **2004**, 14, 3139-3143.

135. J. F. Eichler, O. Just and W. S. Rees, Jr., "A General Route to M_4N_4 Heterocubanes: Synthesis and Crystal Structure of $[M(\mu_3\text{-NSiMe}_3)]_4$ ($M=\text{Ge, Pb}$)," *Modern Aspects of Main Group Chemistry*, ACS Symp. Book Series, in press.