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Nota di contenuto	Front Cover; Verified Syntheses of Zeolitic Materials; Copyright Page; Table of contents; Preface; Synthesis commission: membership; Introduction and explanatory notes; Conditions for recording of XRD patterns; Contributors; Part I: Introduction to zeolite synthesis; Chapter 1. Source materials for zeolite synthesis; Chapter 2. Nucleation, growth, and seeding in zeolite synthesis; Chapter 3. Synthesis of high-silica zeolites and phosphate-based materials in the presence of fluorides; Chapter 4. Templating in molecular sieve synthesis Chapter 5. The pH value and its importance for the crystallization of zeolites Chapter 6. Microwave technology in zeolite synthesis; Chapter 7. Preparation of zeolite membranes; Chapter 8. Safety considerations for zeolite synthesis; Chapter 9. Product characterization by x-ray powder diffraction; Chapter 10. Determination of the elemental composition of zeolitic materials; Chapter 11. Characterization of zeolites by SEM; Chapter 12. Product characterization by NMR; Chapter 13. Characterization of zeolites by sorption capacity measurements; Chapter 14. Ion-exchange capacity Chapter 15. Characterization by IR spectroscopy Chapter 16. How to read a patent; Part II: Synthesis recipes; Chapter 17. ABW - Li-A (BW);

Chapter 18. AEI - AIPO4-18; Chapter 19. AEI - SAPO-18 (DPEA method); Chapter 20. AEI - SAPO-18 (TEA method); Chapter 21. AEL - AIPO4-11; Chapter 22. AFI - AIPO4-5; Chapter 23. AFI - SAPO-5; Chapter 24. AFI - COAPO-5; Chapter 25. AFI - SSZ-24; Chapter 26. AFO - SAPO-41; Chapter 27. AFS - MAPO-46; Chapter 28. ANA - Analcime; Chapter 29. AST - AIPO4-16; Chapter 30. ATN - MAPO-39; Chapter 31. BEA - Zeolite Beta; Chapter 32. BEA - [Ti, Al] Beta Chapter 33. CAN - Cancrinite Chapter 34. CHA - Chabazite; Chapter 35. CHA - SSZ-13; Chapter 36. CHA - SAPO-34; Chapter 37. CHA - SAPO-44; Chapter 38. -CLO - Cloverite (GaPO₄); Chapter 39. EAB - TMA-E; Chapter 40. EDI - Barrer K-F; Chapter 41. EDI - Linde Type F; Chapter 42. EMT - EMC-2; Chapter 43. EUO - [Ga] EU-1; Chapter 44. FAU - Linde Type X; Chapter 45. FAU - Low-silica Type X (LSX); Chapter 46. FAU - Linde Type Y; Chapter 47. FAU - High-silica Faujasite EMC-1; Chapter 48. FAU - [Ga] Type Y; Chapter 49. FAU - SAPO-37; Chapter 50. FER - ZSM-3 5; Chapter 51. GIS - Zeolite P Chapter 52. KFI - ZK-5 Chapter 53. KFI - High-silica KFI; Chapter 54. LEV - [B]-Levyne; Chapter 55. LTA - Linde Type A; Chapter 56. LTA - ZK-4; Chapter 57. LTA - Zeolite Alpha; Chapter 58. LTA - GaPO₄; Chapter 59. LTL - Linde Type L; Chapter 60. MAZ - Mazzite; Chapter 61. MER - Linde W; Chapter 62. MFI - High-alumina ZSM-5; Chapter 63. MFI - Silicalite-I; Chapter 64. MFI - [B] ZSM-5; Chapter 65. MFI - [Fe] ZSM-5; Chapter 66. MFI - [Ti] ZSM-5; Chapter 67. MFI - [Ti, Al] ZSM-5; Chapter 68. MOR - Mordenite; Chapter 69. MTN - ZSM-39; Chapter 70. MTT - ZSM-23; Chapter 71. MTW - ZSM-12 Chapter 72. MTW- [Ga] ZSM-12

Sommario/riassunto

Zeolite synthesis is an active field of research. As long as this continues, new phases will be discovered and new techniques for preparing existing phases will appear. This edition of Verified Synthesis of Zeolitic Materials contains all the recipes from the first edition plus 24 new recipes. Five new introductory articles have been included plus those from the first edition, some of which have been substantially revised. The XRD patterns have been recorded using different instrument settings from those in the first edition and are intended to conform to typical X-ray diffraction practice.
