Robert Feigelson
Professor (Research) of Materials Science and Engineering, Emeritus

Bio

ACADEMIC APPOINTMENTS
• Professor Emeritus, Materials Science and Engineering

Publications

PUBLICATIONS

• High speed growth of SrI2 scintillator crystals by the EFG process *Journal of Crystal Growth*
  Calvert, G., Guguschev, C., Burger, A., Groza, M., Derby, J. J., Feigelson, R. S.
  2016; 455: 143-151

• The application of floating dies for high speed growth of CsI single crystals by edge-defined film-fed growth (EFG) *Journal of Crystal Growth*
  Guguschev, C., Calvert, G., Podowitz, S., Vaillonis, A., Yeckel, A., Feigelson, R. S.
  2014; 404: 231-240

• Characterization of light output and scintillation emission in CsI(Tl), NaI(Tl), and LaBr3(Ce) under isostatic pressure *8th International Conference on Luminescence Detectors and Transformers of Ionizing Radiation (LUMDETR)*
  Gascon, M., Lam, S., Wang, S., Curtarolo, S., Feigelson, R. S.
  PERGAMON-ELSEVIER SCIENCE LTD.2013: 70–75

• Nonproportionality and Scintillation Responses of LSO:Ce From 4.3 to 300 K *Symposium on Radiation Measurements and Applications (SORMA)*
  Lam, S., Gascon, M., Podowitz, S., Curtarolo, S., Feigelson, R. S.
  IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC.2013

• An apparatus for studying scintillator properties at high isostatic pressures *Review of Scientific Instruments*
  Gaume, R. M., Lam, S., Gascon, M., Setyawan, W., Curtarolo, S., Feigelson, R. S.
  2013; 84 (1)

• Analysis of scintillator crystal production via the edge-defined film-fed growth method *SPIE Conference on Hard X-Ray, Gamma-Ray, and Neutron Detector Physics XV*
  Yeckel, A., Feigelson, R. S., Derby, J. J.
  SPIE-INT SOC OPTICAL ENGINEERING2013

• Nonproportionality and Scintillation Studies of Eu:SrI2 From 295 to 5 K *IEEE Transactions on Nuclear Science*
  Lam, S., Gascon, M., Hawrami, R., Setyawan, W., Curtarolo, S., Feigelson, R. S., Gaume, R. M.
  2012; 59 (5): 2052-2056

• Probing grain boundaries in ceramic scintillators using x-ray radioluminescence microscopy *Journal of Applied Physics*
  Podowitz, S. R., Gaume, R. M., Feigelson, R. S.
  2012; 111 (1)

• High-Throughput Combinatorial Database of Electronic Band Structures for Inorganic Scintillator Materials *ACS Combinatorial Science*
• Fabrication and Properties of Translucent SrI_2 and Eu: SrI_2 Scintillator Ceramics *IEEE TRANSACTIONS ON NUCLEAR SCIENCE*
Podowitz, S. R., Gaume, R. M., Hong, W. T., Laouar, A., Feigelson, R. S.
2010; 57 (6): 3827-3835

• Effect of Europium Concentration on Densification of Transparent Eu: Y2O3 Scintillator Ceramics Using Hot Pressing *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*
Podowitz, S. R., Gaume, R., Feigelson, R. S.
2010; 93 (1): 82-88

• Comparative Study of Nonproportionality and Electronic Band Structures Features in Scintillator Materials *IEEE TRANSACTIONS ON NUCLEAR SCIENCE*
Setyawan, W., Gaume, R. M., Feigelson, R. S., Curtarolo, S.
2009; 56 (5): 2989-2996

• Mechanisms of nonstoichiometry in Y3Al5O12 *APPLIED PHYSICS LETTERS*
2008; 93 (19)

• The Proceedings of the 15th International Conference on Crystal Growth (ICCG-15) in conjunction with the International Conference on Vapor Growth and Epitaxy (ICCG-15) and the US Biennial Workshop on Organometallic Vapor Phase Epitaxy (OMVPE-13) - Preface *JOURNAL OF CRYSTAL GROWTH*
Stringfellow, G. B., Feigelson, R. S.
2008; 310 (7-9): 1287-1287

• Electron paramagnetic resonance and electron-nuclear double resonance study of Mn2+ ions in CdGeAs2 crystals *4th International Conference on Semiconductor Quantum Dots (QD 2006)*
Evans, S. M., Garces, N. Y., DeMattei, R. C., Feigelson, R. S., Zawilski, K. T., Giles, N. C., Halliburton, L. E.
WILEY-V C H VERLAG GMBH. 2006: 4070–79

• Improving optical transparency in CdGeAs2 crystals by controlling crystalline defects *3rd Asian Conference on Crystal Growth and Crystal Technology (CGCT-3)*
Feigelson, R. S.
ELSEVIER SCIENCE BV. 2006: 179–87

• Correlation of the electrical and optical properties of p-type CdGeAs2 *JOURNAL OF APPLIED PHYSICS*
Bai, L. H., Xu, C. C., Giles, N. C., Nagashio, K., Feigelson, R. S.
2006; 99 (1)

• Photoluminescence of n-type CdGeAS(2) *JOURNAL OF PHYSICS-CONDENSED MATTER*
Bai, L. H., Xu, C. C., Nagashio, K., Yang, C. H., Feigelson, R. S., Schunemann, P. G., Giles, N. C.
2005; 17 (37): 5687-5696

• Control of growth interface shape using vibroconvective stirring applied to vertical Bridgman growth *JOURNAL OF CRYSTAL GROWTH*
Zawilski, K. T., Custodio, M. C., DeMattei, R. C., Feigelson, R. S.
2005; 282 (1-2): 236-250

• Zone leveling of lead magnesium niobate-lead titanate crystals using RF heating *JOURNAL OF CRYSTAL GROWTH*
Zawilski, K. T., DeMattei, R. C., Feigelson, R. S.
2005; 277 (1-4): 393-400

• Urbach rule used to explain the variation of the absorption edge in CdGeAs2 crystals *JOURNAL OF PHYSICS-CONDENSED MATTER*
Bai, L. H., Xu, C. C., Schunemann, P. G., Nagashio, K., Feigelson, R. S., Giles, N. C.
2005; 17 (3): 549-558

• Correlation between dislocation etch pits and optical absorption in CdGeAs2 *JOURNAL OF CRYSTAL GROWTH*
Nagashio, K., Watcharapasorn, A., Zawilski, K. T., DeMattei, R. C., Feigelson, R. S., Bai, L., Giles, N. C., Halliburton, L. E., Schunemann, P. G.
2004; 269 (2-4): 195-206
- Observation of paramagnetic point defects in BBO (beta-BaB2O4) crystals  
  Hong, W., Halliburton, L. E., Perlov, D., Stevens, K. T., Route, R. K., Feigelson, R. S.  
  ELSEVIER SCIENCE BV. 2004: 437–41

- Donor-acceptor pair emission near 0.55 eV in CdGeAs2  
  JOURNAL OF APPLIED PHYSICS  
  Bai, L. H., Giles, N. C., Schunemann, P. G., Pollak, T. M., Nagashio, K., Feigelson, R. S.  
  2004; 95 (9): 4840-4844

- Optical absorption and electron-nuclear double resonance study of Ni+ ions in AgGaSe2 crystals  
  JOURNAL OF PHYSICS-CONDENSED MATTER  
  2004; 16 (15): 2593-2607

- Fiber growth of near stoichiometric LiNbO3 single crystals by the laser-heated pedestal growth method  
  JOURNAL OF CRYSTAL GROWTH  
  Nagashio, K., Watcharapasorn, A., DeMattei, R. C., Feigelson, R. S.  
  2004; 265 (1-2): 190-197

- 50 years of progress in crystal growth - Preface  
  JOURNAL OF CRYSTAL GROWTH  
  Feigelson, R. S.  
  2004; 264 (4): XI-XVI

- Luminescence and optical absorption study of p-type CdGeAs2  
  JOURNAL OF PHYSICS-CONDENSED MATTER  
  Bai, L. H., Poston, J. A., Schunemann, P. G., Nagashio, K., Feigelson, R. S., Giles, N. C.  
  2004; 16 (8): 1279-1286

- Growth and observation of domain structure of lead magnesium niobate-lead titanate single crystals  
  JOURNAL OF CRYSTAL GROWTH  
  Shin, M. C., Chung, S. J., LEE, S. G., Feigelson, R. S.  
  2004; 263 (1-4): 412-420

- Effect of donors and acceptors on the optical properties of CdGeAs(2)  
  Conference on Nonlinear Frequency Generation and Conversion  
  Bai, L., Garces, N. Y., Xu, C. C., Halliburton, L. E., Giles, N. C., Schunemann, P. G., Nagashio, K., Yang, C., Feigelson, R. S.  
  SPIE-INT SOC OPTICAL ENGINEERING. 2004: 22–29

- Electron paramagnetic resonance of Cr2+ and Cr4+ ions in CdGeAs2 crystals  
  JOURNAL OF APPLIED PHYSICS  
  Garces, N. Y., Giles, N. C., Halliburton, L. E., Nagashio, K., Feigelson, R. S., Schunemann, P. G.  
  2003; 94 (12): 7567-7570

- Segregation during the vertical Bridgman growth of lead magnesium niobate-lead titanate single crystals  
  JOURNAL OF CRYSTAL GROWTH  
  Zawilski, K. T., Custodio, M. C., DeMattei, R. C., LEE, S. G., Monteiro, R. G., Odagawa, H., Feigelson, R. S.  
  2003; 258 (3-4): 353-367

- Vibroconvective mixing applied to vertical Bridgman growth  
  JOURNAL OF CRYSTAL GROWTH  
  Zawilski, K. T., Claudia, M., Custodio, C., DeMattei, R. C., Feigelson, R. S.  
  2003; 258 (1-2): 211-222

- Electron paramagnetic resonance study of electron and hole traps in beta-BaB2O4 crystals  
  JOURNAL OF APPLIED PHYSICS  
  Hong, W., Halliburton, L. E., Stevens, K. T., Perlov, D., Catella, G. C., Route, R. K., Feigelson, R. S.  
  2003; 94 (4): 2510-2515

- Effect of Taylor vortices on calcium carbonate crystallization by gas-liquid reaction  
  JOURNAL OF CRYSTAL GROWTH  
  Kang, S. H., Goo, S., LEE, S. G., Jung, W. M., Kim, M. C., Kim, W. S., Choi, C. K., Feigelson, R. S.  
  2003; 254 (1-2): 196-205

- Effects of reduction treatment on the photorefractive properties of Pb0.5Ba0.5Nb2O6  
  OPTICAL MATERIALS  
  Lee, M., Feigelson, R. S.  
  2003; 21 (4): 759-764

- High-temperature healing of interfacial voids in GaAs wafer bonding  
  JOURNAL OF APPLIED PHYSICS  
  Wu, Y. C., Liu, P. C., Feigelson, R. S., Route, R. K.  
• Thermal gradient control at the solid-liquid interface in the laser-heated pedestal growth technique. *Journal of Crystal Growth*  
Andreatta, M. R., Andreatta, E. R., Hernandez, A. C., Feigelson, R. S.  
2002; 234 (4): 759-761

• Preparation and thermoelectric properties of CeFe4As12. *Journal of Applied Physics*  
Watcharapasorn, A., Feigelson, R. S., Caillat, T., Borschchevsky, A., Snyder, G. J., Fleurial, J. P.  
2002; 91 (3): 1344-1348

• A preliminary study of space- and ground-grown insulin crystals by X-ray diffraction and by light scattering tomography. *8th International Conference on Crystallization of Biological Macromolecules*  
De Mattei, R. C., Feigelson, R. S., Bray, T. L., DeLucas, L. J., Symersky, J.  
ELSEVIER SCIENCE BV. 2001: 511–19

• Conditions for the electrochemical synthesis of the CoPn(3) (Pn = P, As, Sb) skutterudites. *Journal of the Electrochemical Society*  
De Mattei, R. C., Watcharapasorn, A., Feigelson, R. S.  
2001; 148 (9): D109-D111

• Thermal conductivity of pure and Mg-doped CuGeO3 in the incommensurate phase. *Physical Review B*  
Takeya, J., Tsukada, I., Ando, Y., Masuda, T., Uchinokura, K., Tanaka, I., Feigelson, R. S., Kapitulnik, A.  
2001; 63 (21)

• Growth and characterization of Pb(Mg1/3Nb2/3)O3 and Pb(Mg1/3Nb2/3)O3-PbTiO3 thin films using solid source MOCVD techniques. *Journal of Crystal Growth*  
Lee, S. Y., Custodio, M. C., Lim, H. J., Feigelson, R. S., Maria, J. P., Trolier-McKinstry, S.  
2001; 226 (2-3): 247-253

• New class of nonlinear optical crystals among arginine salts. *ICONO 2001 Conference*  
Petrosyan, A. M., Feigelson, R. S., Van Stryland, E. W., Sukiasyan, R. P., Karapetyan, H. A.  
SPIE-INT SOC OPTICAL ENGINEERING. 2001: 217–222

• Growth and investigation of new non-linear optical crystals of LAP family. *Journal of Crystal Growth*  
Petrosyan, A. M., Sukiasyan, R. P., Karapetyan, H. A., Terzyan, S. S., Feigelson, R. S.  
2000; 213 (1-2): 103-111

• Striations in YIG fibers grown by the laser-heated pedestal method. *Journal of Crystal Growth*  
Lim, H. J., DeMattei, R. C., Feigelson, R. S., Rochford, K.  
2000; 212 (1-2): 191-203

Watcharapasorn, A., DeMattei, R. C., Feigelson, R. S., Caillat, T., Borschchevsky, A., Snyder, G. J., Fleurial, J.  
2000; 39 (1): 14-18

• Preparation and thermoelectric properties of some phosphide skutterudite compounds. *Journal of Applied Physics*  
Watcharapasorn, A., DeMattei, R. C., Feigelson, R. S., Caillat, T., Borschchevsky, A., Snyder, G. J., Fleurial, J. P.  
1999; 86 (11): 6213-6217

• Waveguides formed by incoherent dark solitons. *Optics Letters*  
Chen, Z. G., Segev, M., Christodoulides, D. N., Feigelson, R. S.  
1999; 24 (16): 1160-1162

• An approach to the defect structure analysis of lithium niobate single crystals. *Journal of Applied Physics*  
Safaryan, F. P., Feigelson, R. S., Petrosyan, A. M.  
1999; 85 (12): 8079-8082

• c-axis lithium niobate thin film growth on silicon using solid-source metalorganic chemical vapor deposition. *Journal of Materials Research*  
Lee, S. Y., Feigelson, R. S.  
1999; 14 (6): 2662-2667

• Growth and electrostrictive properties of Pb(Mg1/3Nb2/3)O3 crystals. *Applied Physics Letters*  
1999; 74 (7): 1030-1032

- Growth of lead barium niobate (Pb1-xBaxNb2O6) crystals by the vertical Bridgman method II. Sr0.61Ba0.39Nb2O6-seeded growth *JOURNAL OF CRYSTAL GROWTH*
  Lee, M. K., Feigelson, R. S.
  1998; 193 (3): 355-363

- Growth of lead barium niobate (Pb1-xBaxNb2O6) crystals by the vertical Bridgman method I. Self-seeded growth *JOURNAL OF CRYSTAL GROWTH*
  Lee, M. K., Feigelson, R. S., Route, R. K.
  1998; 193 (3): 347-354

- Second-harmonic generation from needlelike ferroelectric domains in Sr0.6Ba0.4Nd2O6 single crystals *APPLIED PHYSICS LETTERS*
  Kawai, S., Ogawa, T., Lee, H. S., DeMattei, R. C., Feigelson, R. S.
  1998; 73 (6): 768-770

- Thermal conductivity of the spin-Peierls compound CuGeO3 *PHYSICAL REVIEW B*
  1998; 58 (6): R2913-R2916

- Infrared OH- absorptions in Sr0.61Ba0.39Nb2O6 crystals *JOURNAL OF APPLIED PHYSICS*
  Lee, M., Lee, H. S., Feigelson, R. S.
  1998; 84 (3): 1558-1560

- 16-μm infrared generation by difference-frequency mixing in diffusion-bonded-stacked GaAs *OPTICS LETTERS*
  1998; 23 (13): 1010-1012

- Photorefractive properties of tungsten bronze ferroelectric lead barium niobate (Pb1-xBaxNb2O6) crystals *JOURNAL OF APPLIED PHYSICS*
  Lee, M., Feigelson, R. S., Liu, A., Hesselink, L.
  1998; 83 (11): 5967-5972

- Effects of wafer thermostability and wafer-holding materials on optical loss in GaAs annealing *JOURNAL OF APPLIED PHYSICS*
  1998; 83 (10): 5552-5554

- Ferroelectric properties of tetragonal lead barium niobate (Pb1-xBaxNb2O6) crystals near the morphotropic phase boundary *JOURNAL OF MATERIALS RESEARCH*
  Lee, M., Feigelson, R. S.
  1998; 13 (5): 1345-1350

- Reduced optical losses in MOCVD grown lithium niobate thin films on sapphire by controlling nucleation density *JOURNAL OF CRYSTAL GROWTH*
  Lee, S. Y., Feigelson, R. S.
  1998; 186 (4): 594-606

- Bridgman growth of strontium barium niobate single crystals *JOURNAL OF CRYSTAL GROWTH*
  Lee, H. S., Wilde, J. P., Feigelson, R. S.
  1998; 187 (1): 89-101

- Electro-optic and photorefractive two-beam coupling properties of lead barium niobate crystals *JOURNAL OF APPLIED PHYSICS*
  Liu, A., Hesselink, L., Lee, M., Feigelson, R. S.
  1998; 83 (5): 2826-2830

- Generation of tunable 187.9-196-nm radiation in beta-BaB2O4 (vol 22, pg 1606, 1997) *OPTICS LETTERS*
  Bhar, G. C., Chatterjee, U., Rudra, A. M., Kumbhakar, P., Route, R. K., Feigelson, R. S.
  1998; 23 (4): 310-310

- Formation and fixing of diffraction gratings in new photorefractive lead barium niobate (Pb1-xBaxNb2O6) crystals 9th International Meeting on Ferroelectricity (IMF-9)
  Lee, M., Feigelson, R. S., Liu, A., Hesselink, L.
  KOREAN PHYSICAL SOC.1998: S427–S429
- Growth of a new photorefractive material: Tungsten-bronze ferroelectric lead barium niobate (Pb1-xBaxNb2O6) *9th International Meeting on Ferroelectricity (IMF-9)*
  Lee, M., Feigelson, R. S., Liu, A., Hesselink, L.
  KOREAN PHYSICAL SOC.1998: S1221–S1223

- Domain structure and electrical properties of beta-BaB2O4 single crystals grown by direct Czochralski method *9th International Meeting on Ferroelectricity (IMF-9)*
  Plokhikh, A. A., Kim, C. D., Joo, G. T., Route, R. K., Feigelson, R. S.
  KOREAN PHYSICAL SOC.1998: S1231–S1233

- Improved GaAs bonding process for quasi-phase-matched second harmonic generation *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*

- Low optical loss wafer bonded GaAs structures for quasi-phase-matched second harmonic generation *Symposium F on Infrared Applications of Semiconductors II, at the 1997 MRS Fall Meeting*
  Wu, Y. C., Feigelson, R. S., Route, R. K.
  MATERIALS RESEARCH SOCIETY.1998: 481–486

- Waveguides induced by photorefractive screening solitons *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*
  Shih, M. F., Chen, Z. G., Mitchell, M., Segev, M., LEE, H., Feigelson, R. S., Wilde, J. P.
  1997; 14 (11): 3091-3101

- Generation of tunable 187.9-196-nm radiation in beta-Ba2BO4 *OPTICS LETTERS*
  Bhar, G. C., Chatterjee, U., Rudra, A. M., Kummbakar, P., Route, R. K., Feigelson, R. S.
  1997; 22 (21): 1606-1608

- Synchronous pulsed infrared detection in AgGaSe2 crystal using 1.318 mu m pump *APPLIED PHYSICS B-LASERS AND OPTICS*
  Bhar, G. C., Das, S., Route, R. K., Feigelson, R. S.
  1997; 65 (4-5): 471-473

- Measurements of OH- absorption and proton activation in Pb1-xBaxNb2O6 crystals with applications to holographic storage *PHYSICAL REVIEW B*
  Lee, M., Feigelson, R. S., Liu, A., Hesselink, L., Route, R. K.
  1997; 56 (13): 7898-7904

- Growth of epitaxial strontium barium niobate thin films by solid source metal-organic chemical vapor deposition *JOURNAL OF CRYSTAL GROWTH*
  Lee, M. K., Feigelson, R. S.
  1997; 180 (2): 220-228

- Diffusion bonding of GaAs wafers for nonlinear optics applications *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  1997; 144 (4): 1439-1441

- Observation and thermal fixing of holographic gratings in lead barium niobate crystal *OPTICS LETTERS*
  Liu, A. Y., Bashaw, M. C., Hesselink, L., Lee, M., Feigelson, R. S.
  1997; 22 (3): 187-189

- Optical properties of lead barium niobate (Pb1-xBaxNb2O6) crystals *JOURNAL OF APPLIED PHYSICS*
  Lee, M. K., LEE, H., Route, R. K., Feigelson, R. S.
  1997; 81 (2): 917-923

- Inhomogeneities and segregation behavior in strontium-barium niobate fibers grown by laser-heated pedestal growth technique .2. *JOURNAL OF CRYSTAL GROWTH*
  Erdei, S., Galambos, L., Tanaka, I., Hesselink, L., Cross, L. E., Feigelson, R. S., Ainger, F. W., Kojima, H.
  1996; 167 (3-4): 670-680

- Inhomogeneities and segregation behavior in strontium-barium niobate fibers grown by laser-heated pedestal growth technique .1. *JOURNAL OF CRYSTAL GROWTH*
  Galambos, L., Erdei, S., Tanaka, I., Hesselink, L., Cross, L. E., Feigelson, R. S., Ainger, F. W., Kojima, H.
  1996; 167 (3-4): 660-669
Epitaxial growth of lithium niobate thin films by the solid source MOCVD method 11th International Conference on Crystal Growth
Feigelson, R. S.
ELSEVIER SCIENCE BV.1996: 1–16

Heat treatment studies on silver gallium diselenide (AgGaSe2) crystals MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY
Kim, N. H., Shin, D. H., Feigelson, R. S.
1996; 38 (3): 229-235

Phase formation of BaB2O4 from melts in graphite crucible JOURNAL OF ALLOYS AND COMPOUNDS
Kimura, H., Feigelson, R. S.
1996; 234 (2): 187-192

Structure of ferroelectric Pb5Al3F19 at 160 K, polarization reversal and relationship to ferroelectric Pb5Cr3F19 at 295 K ACTA CRYSTALLOGRAPHICA SECTION B-STRUCTURAL SCIENCE
Sarraute, S., Ravez, J., Vondermuhll, R., Bravic, G., Feigelson, R. S., Abrahams, S. C.
1996; 52: 72-77

Growth of lithium niobate thin films by solid source MOCVD Conference on Nonlinear Frequency Conversion - Materials, Devices, and Applications
Lee, S. Y., Route, R. K., Feigelson, R. S.

Segregation and inhomogeneities in photorefractive SBN fibers Photorefractive Fiber and Crystal Devices - Materials, Optical Properties, and Applications II Conference
Erdei, S., Galambos, L., Tanaka, I., Hesselink, L., Ainger, F. W., Cross, L. E., Feigelson, R. S.

CRYSTALLINE QUALITY AND SURFACE-MORPHOLOGY OF (100)CEO2 THIN-FILMS GROWN ON SAPPHIRE SUBSTRATES BY SOLID SOURCE METALORGANIC CHEMICAL-VAPOR-DEPOSITION JOURNAL OF CRYSTAL GROWTH
Lu, Z., Hiskes, R., DICAROLIS, S. A., Nel, A., Route, R. K., Feigelson, R. S.
1995; 156 (3): 227-234

GROWTH OF CAS THIN-FILMS BY SOLID SOURCE METALORGANIC CHEMICAL-VAPOR-DEPOSITION 8th International Conference on Vapour Growth and Epitaxy
Helbing, R., Birecki, H., DICAROLIS, S. A., Feigelson, R. S., Hiskes, R.
ELSEVIER SCIENCE BV.1995: 599–603

The growth of optical quality LiNbO3 thin films on sapphire and LiTaO3 substrates using solid-source MOCVD Symposium on Thin Films for Integrated Optics Applications, at the 1995 MRS Spring Meeting
Lee, S. Y., Route, R. K., Feigelson, R. S.
MATERIALS RESEARCH SOC.1995: 177–182

LATTICE-DYNAMICS AND HYPERFINE INTERACTIONS IN ZNF2 SINGLE-CRYSTALS PHYSICAL REVIEW B
1994; 50 (18): 13355-13363

EPITAXIAL LINBO3 THIN-FILMS ON SAPPHIRE SUBSTRATES GROWN BY SOLID SOURCE MOCVD JOURNAL OF MATERIALS RESEARCH
1994; 9 (9): 2258-2263

SRS SINGLE-CRYSTALS GROWN BY PHYSICAL VAPOR TRANSPORT JOURNAL OF CRYSTAL GROWTH
Helbing, R., Feigelson, R. S.
1994; 138 (1-4): 1075-1075

GROWTH OF SRS SINGLE-CRYSTALS BY PHYSICAL VAPOR TRANSPORT 9th American Conference on Crystal Growth (ACCG-9)
Helbing, R., Feigelson, R. S.
ELSEVIER SCIENCE BV.1994: 150–54

EVALUATION OF AGGASE2 TEMPERATURE-DEPENDENT NONLINEAR DEVICES JOURNAL OF PHYSICS D-APPLIED PHYSICS
Bhar, G. C., Das, S., Chatterjee, U., Rudra, A. M., Feigelson, R. S., Route, R. K.
• CHARACTERIZATION OF SPUTTERED BARIUM FERRITE THIN-FILMS ON SILICON-NITRIDE COATED CARBON SUBSTRATES Symposium on Epitaxial Oxide Thin Films and Heterostructures, at the MRS Spring Meeting
  Li, J. S., Sinclair, R., Rosenblum, S. S., Hayashi, H.
  MATERIALS RESEARCH SOC. 1994: 59–64

• GROWTH OF (001)-ORIENTED SBN THIN-FILMS BY SOLID SOURCE MOCVD Symposium on Metal-Organic Chemical Vapor Deposition of Electronic Ceramics, at the 1993 Fall Meeting of the Materials-Research-Society
  Lu, Z., Feigelson, R. S., Route, R. K., Hiskes, R., DICAROLIS, S. A.
  MATERIALS RESEARCH SOC. 1994: 59–64

• ELECTROOPTIC MATERIALS BY SOLID SOURCE MOCVD Symposium on Metal-Organic Chemical Vapor Deposition of Electronic Ceramics, at the 1993 Fall Meeting of the Materials-Research-Society
  Hiskes, R., DICAROLIS, S. A., FOUQUET, J., Lu, Z., Feigelson, R. S., Route, R. K., Leplingard, F., Foster, C. M.
  MATERIALS RESEARCH SOC. 1994: 299–310

• INVESTIGATION OF ELECTRONIC-STRUCTURE AND ANISOTROPY OF THE LAMB-MOSSBAUER FACTOR IN ZNF2 SINGLE-CRYSTALS International Conference on the Applications of the Mossbauer Effect (ICAME 93)
  SPRINGER 1994: 1453–58

• STUDY OF THE BORON OXYGEN UNITS IN CRYSTALLINE AND MOLTEN BARIUM METABORATE BY HIGH-TEMPERATURE RAMAN-SPECTROSCOPY JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS
  Voronko, Y. K., Gorbachev, A. V., Osiko, V. V., Sobol, A. A., Feigelson, R. S., Route, R. K.
  1993; 54 (11): 1579-1585

• DIFFUSION-BONDED STACKED GAAS FOR QUASI-PHASE-MATCHED 2ND-HARMONIC GENERATION OF A CARBON-DIOXIDE LASER ELECTRONICS LETTERS
  1993; 29 (22): 1942-1944

• LUMINESCENCE OF STOICHIOMETRIC LITHIUM-NIOBATE CRYSTALS MATERIALS RESEARCH BULLETIN
  Emond, M. H., Wiegel, M., Blasse, G., FEIGELSON, R.
  1993; 28 (10): 1025-1028

• SINGLE SOURCE MOCVD OF EPITAXIAL OXIDE THIN-FILMS 10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)
  Hiskes, R., DICAROLIS, S. A., JACOWITZ, R. D., Lu, Z., Feigelson, R. S., Route, R. K., Young, J. L.
  ELSEVIER SCIENCE BV. 1993: 781–87

• EPITAXIAL-GROWTH OF HIGH-QUALITY ZNSE AND ZNSE/ZNS SUPERLATTICES FOR OPTICAL-PROCESSING 10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)
  PONG, C. D., Feigelson, R. S., DeMattei, R. C.
  ELSEVIER SCIENCE BV. 1993: 650–54

• SOLID SOURCE MOCVD FOR THE EPITAXIAL-GROWTH OF THIN OXIDE-FILMS 10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)
  Lu, Z., Feigelson, R. S., Route, R. K., DICAROLIS, S. A., Hiskes, R., JACOWITZ, R. D.
  ELSEVIER SCIENCE BV. 1993: 788–92

• THERMAL METHODS FOR CRYSTALLIZING BIOLOGICAL MACROMOLECULES 10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)
  DeMattei, R. C., Feigelson, R. S.
  ELSEVIER SCIENCE BV. 1993: 1225–31

• THE EFFECT OF FORCED-CONVECTION ON THE MELT GRADIENT AND GROWTH-RATE DURING THE BRIDGMAN AND GRADIENT FREEZE CRYSTAL-GROWTH OF SILVER-DOPED LEAD BROMIDE 10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)
  DeMattei, R. C., Feigelson, R. S.
  ELSEVIER SCIENCE BV. 1993: 1062–68
• SURFACE STABILITY OF LITHIUM TRIBORATE CRYSTALS GROWN FROM EXCESS B2O3 SOLUTIONS. *10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)*
  Bruck, E., RAYMAKERS, R. J., Route, R. K., Feigelson, R. S.
  ELSEVIER SCIENCE BV.1993: 933–37

• CRYSTAL-GROWTH OF COMPOUNDS IN THE MGO-NB2O5 BINARY-SYSTEM. *10TH INTERNATIONAL CONF ON CRYSTAL GROWTH (ICGG-10)*
  Bruck, E., Route, R. K., RAYMAKERS, R. J., Feigelson, R. S.
  ELSEVIER SCIENCE BV.1993: 842–45

• HYDROGENATION OF WIDE-BAND-GAP II-VI SEMICONDUCTORS. *APPLIED PHYSICS LETTERS*
  PONG, C., Johnson, N. M., Street, R. A., Walker, J., Feigelson, R. S., DeMattei, R. C.
  1992; 61 (25): 3026-3028

• FABRICATION, CHARACTERIZATION AND INDEX PROFILE MODELING OF HIGH-DAMAGE RESISTANCE ZN-DIFFUSED WAVE-GUIDES IN CONGRUENT AND MGO - LITHIUM-NIOBATE. *JOURNAL OF LIGHTWAVE TECHNOLOGY*
  Young, W. M., Fejer, M. M., Digonnet, M. J., Marshall, A. F., Feigelson, R. S.
  1992; 10 (9): 1238-1246

• FACTORS AFFECTING THE MORPHOLOGY OF ISOCITRATE LYASE CRYSTALS. *4TH INTERNATIONAL SYMP ON CRYSTAL GROWTH OF BIOLOGICAL MACROMOLECULES - A FEBS ADVANCED LECTURE COURSE 1991*
  DeMattei, R. C., Feigelson, R. S., Weber, P. C.
  ELSEVIER SCIENCE BV.1992: 152–60

• CONTROLLING NUCLEATION IN PROTEIN SOLUTIONS. *4TH INTERNATIONAL SYMP ON CRYSTAL GROWTH OF BIOLOGICAL MACROMOLECULES - A FEBS ADVANCED LECTURE COURSE 1991*
  DeMattei, R. C., Feigelson, R. S.
  ELSEVIER SCIENCE BV.1992: 21–30

• SURFACE MIGRATION AND VOLUME DIFFUSION IN THE AGGASE2-AG2SE SYSTEM. *JOURNAL OF MATERIALS RESEARCH*
  Kim, N. H., Feigelson, R. S., Route, R. K.
  1992; 7 (5): 1215-1220

• HIGH-QUALITY EPITAXIAL FILMS OF ZNSE AND ZNSE/ZNS STRAINED LAYER SUPERLATTICE CRYSTALS GROWN BY MOCVD. *SYMP ON WIDE BAND GAP SEMICONDUCTORS, AT THE 1991 FALL MEETING OF THE MATERIALS RESEARCH SOC*
  PONG, C. D., DeMattei, R. C., Feigelson, R. S.
  MATERIALS RESEARCH SOC.1992: 293–298

• MECHANICAL CHARACTERIZATION OF SINGLE-CRYSTAL ALPHA=AL2O3 FIBERS GROWN BY THE LASER-HEATED PEDESTAL TECHNIQUE. *JOURNAL OF MATERIALS SCIENCE LETTERS*
  Wu, H. F., Porratta, A. J., Feigelson, R. S.
  1991; 10 (24): 1428-1429

• PROCESSING OF BI2.1SR1.8CA1.1CU2O8 SOURCE MATERIAL FOR FLOAT-ZONE FIBER GROWTH. *JOURNAL OF MATERIALS RESEARCH*
  PESZKIN, P. N., RAYMAKERS, R. J., Feigelson, R. S., MOULTON, L. V., Lu, Z.
  1991; 6 (11): 2280-2286

• 6.5-W, 532-NM RADIATION BY CW RESONANT EXTERNAL-CAVITY 2ND-HARMONIC GENERATION OF AN 18-W ND-YAG LASER IN LIB3O5. *OPTICS LETTERS*
  Yang, S. T., POHALSKI, C. C., Gustafson, E. K., Byer, R. L., Feigelson, R. S., RAYMAKERS, R. J., Route, R. K.
  1991; 16 (19): 1493-1495

• PHASE-EQUILIBRIA AND SOLIDIFICATION BEHAVIOR IN THE PBF2-ALF3 SYSTEM. *JOURNAL OF MATERIALS RESEARCH*
  MOULTON, L. V., Feigelson, R. S.
  1991; 6 (10): 2188-2192

• DIAMETER STABILIZATION OF CZOCHRALSKI-GROWN SR0.61BA0.39NB2O6 (SBN) CRYSTALS USING REAL-TIME COMPUTER CONTROL. *JOURNAL OF CRYSTAL GROWTH*
  Wilde, J. P., Hesselink, L., Feigelson, R. S.
  1991; 113 (3-4): 337-359

• PHOTOREFRACTIVE-DAMAGE-RESISTANT ZN-DIFFUSED WAVE-GUIDES IN MGO-LINBO3. *OPTICS LETTERS*
Young, W. M., Feigelson, R. S., Fejer, M. M., Digonnet, M. J., Shaw, H. J.
1991; 16 (13): 995-997

- **ARTIFICIAL EPITAXY (GRAPHOEPITAXY) OF PROTEINS** *JOURNAL OF CRYSTAL GROWTH*
  Givargizov, E. I., KLIYA, M. O., MELIKADAMYAN, V. R., Grebenko, A. I., DeMattei, R. C., Feigelson, R. S.
  1991; 112 (4): 758-772

- **NONCRITICAL DETECTION OF TUNABLE CO2-LASER RADIATION INTO THE GREEN BY UPCONVERSION IN SILVER THIOGALLATE** *APPLIED PHYSICS B-PHOTOPHYSICS AND LASER CHEMISTRY*
  Bhar, G. C., Chatterjee, U., Datta, P. K., Das, S., Feigelson, R. S., Route, R. K.

- **INFLUENCE OF COMPOSITION OF MGO-DOPED LITHIUM-NIOBATE ON PHASE-MATCHING TEMPERATURE FOR FREQUENCY DOUBLING IN THE VISIBLE** *JOURNAL OF APPLIED PHYSICS*
  Young, W. M., Feigelson, R. S., Jundt, D. H., Fejer, M. M.
  1991; 69 (10): 7372-7374

- **THE SOLUBILITY DEPENDENCE OF CANAVALIN ON PH AND TEMPERATURE** *JOURNAL OF CRYSTAL GROWTH*
  DeMattei, R. C., Feigelson, R. S.
  1991; 110 (1-2): 34-40

- **VIBRATIONAL PROPERTIES OF CDGEP2** *PHYSICAL REVIEW B*
  Artus, L., Pascual, J., Pujol, J., Camassel, J., Feigelson, R. S.
  1991; 43 (3): 2088-2096

- **3.5 WATT CW 532 NM RADIATION BY RESONANT EXTERNAL CAVITY SHG OF AN 8.5 WATT NDYAG LASER IN LBO** *TOPICAL MEETING ON ADVANCED SOLID-STATE LASERS*
  Yang, S. T., POHALSKI, C. C., Gustafson, E. K., Byer, R. L., Feigelson, R. S., RAYMAKERS, R. J., Route, R. K.
  OPTICAL SOC AMERICA.1991: 308–310

- **IMPROVEMENTS IN THE OPTICAL-QUALITY OF AGGASE2 CRYSTALS** *MATERIALS RESEARCH BULLETIN*
  Feigelson, R. S., Route, R. K.
  1990; 25 (12): 1503-1511

- **PURIFICATION OF MATERIALS FOR CRYSTAL-GROWTH AND GLASS PROCESSING - PROCEEDINGS OF THE 3RD WORKSHOP ON PURIFICATION OF MATERIALS FOR CRYSTAL-GROWTH AND GLASS PROCESSING RADISSON INN MAINGATE, ORLANDO, FL, USA 31 OCTOBER - 2 NOVEMBER 1989 - PREFACE** *JOURNAL OF CRYSTAL GROWTH*
  Mazelsky, R., FEIGELSON, R.
  1990; 106 (1): R9-R10

- **IMPROVED YIELD OF BRIDGMAN GROWN AGGASE2 CRYSTALS USING SHAPED CRUCIBLES** *JOURNAL OF CRYSTAL GROWTH*
  Feigelson, R. S., Route, R. K.
  1990; 104 (4): 789-792

- **EFFECT OF VIBRATIONAL STIRRING ON THE QUALITY OF BRIDGMAN-GROWN CDTE** *JOURNAL OF CRYSTAL GROWTH*
  Lu, Y. C., SHIAU, J. J., Feigelson, R. S., Route, R. K.
  1990; 102 (4): 807-813

- **A HIGH SPATIAL-RESOLUTION OPTICAL-PYROMETER** *REVIEW OF SCIENTIFIC INSTRUMENTS*
  NASON, D. O., Yen, C. T., Feigelson, R. S., Tiller, W. A.
  1990; 61 (3): 1024-1028

- **A STUDY OF POLAR CdTe(111) SURFACES USING ANGLE-RESOLVED X-RAY PHOTOELECTRON AND AUGER-ELECTRON SPECTROSCOPY AND LOW-ENERGY ELECTRON-DIFFRACTION** *JOURNAL OF APPLIED PHYSICS*
  Lu, Y. C., Feigelson, R. S., Route, R. K.
  1990; 67 (5): 2583-2590

- **EFFECTS OF HEAT-TREATMENT ON THE SUPERCONDUCTING PROPERTIES OF Bi2Sr2CaCu2Ox FIBERS PRODUCED BY THE LASER-HEATED PEDESTAL GROWTH METHOD** *MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY*
  Brenner, J. M., Feigelson, R. S., Gazit, D., PESZKIN, P. N.
  1990; 5 (3): 351-357
• **GROWTH OF NONLINEAR CRYSTALS FOR FREQUENCY-CONVERSION** *PROGRESS IN CRYSTAL GROWTH AND CHARACTERIZATION OF MATERIALS*
  Feigelson, R. S., RAYMAKERS, R. J., Route, R. K.

• **INFLUENCE OF STARTING MATERIAL ON BI2SR2CAUC2O8 FIBERS GROWN BY THE FLOAT ZONE PROCESS** *SYMP ON HIGH-TEMPERATURE SUPERCONDUCTORS: FUNDAMENTAL PROPERTIES AND NOVEL MATERIALS PROCESSING*
  MOULTON, L. V., Brenner, J. M., RAYMAKERS, R. J., PESZKIN, P. N., Feigelson, R. S.
  MATERIALS RESEARCH SOC.1990: 291–295

• **GROWTH-RATE STUDY OF CANAVALIN SINGLE-CRYSTALS** *JOURNAL OF CRYSTAL GROWTH*
  DeMattei, R. C., Feigelson, R. S.
  1989; 97 (2): 333-336

• **SOLUTION GROWTH OF BARIUM METABORATE CRYSTALS BY TOP SEEDING** *JOURNAL OF CRYSTAL GROWTH*
  Feigelson, R. S., RAYMAKERS, R. J., Route, R. K.
  1989; 97 (2): 352-366

• **PHOTOTHERMAL MEASUREMENTS OF HIGH-TC SUPERCONDUCTORS** *APPLIED PHYSICS LETTERS*
  FANTON, J. T., Mitzi, D. B., Kapitulnik, A., KHURIYAKUB, B. T., Kino, G. S., Gazit, D., Feigelson, R. S.
  1989; 55 (6): 598-599

• **SYNCHRONOUS AND NONCOLLINEAR INFRARED UPCONVERSION IN AGGAS2** *APPLIED PHYSICS LETTERS*
  Bhar, G. C., Das, S., Chatterjee, U., Feigelson, R. S., Route, R. K.
  1989; 54 (16): 1489-1491

• **PREPARATION OF HIGH-TEMPERATURE SUPERCONDUCTOR-METAL WIRE COMPOSITES** *MATERIALS RESEARCH BULLETIN*
  Gazit, D., PESZKIN, P. N., Feigelson, R. S., Sun, J., Geballe, T. H.
  1989; 24 (4): 467-474

• **PROPERTIES OF HIGH-TC OXIDE FIBERS FROM LASER HEATED PEDESTAL GROWTH** *IEEE TRANSACTIONS ON MAGNETICS*
  Sun, J. Z., Feigelson, R. S., Gazit, D., Fork, D., Geballe, T. H., Kapitulnik, A.

• **PREPARATION OF SINGLE-CRYSTAL FIBERS** *INSTITUTE OF PHYSICS CONFERENCE SERIES*
  Feigelson, R. S.
  1989: 75-83

• **GROWTH OF BETA-BAB2O4 BULK CRYSTALS AND FIBERS** *CONF ON GROWTH, CHARACTERIZATION, AND APPLICATIONS OF LASER HOST AND NONLINEAR CRYSTALS*
  Feigelson, R. S., Route, R. K.
  SPIE - INT SOC OPTICAL ENGINEERING.1989: 142–155

• **OPPORTUNITIES FOR RESEARCH ON SINGLE-CRYSTAL FIBERS** *MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY*
  Feigelson, R. S.
  1988; 1 (1): 67-75

• **GROWTH OF BARIUM METABORATE (BAB2O4) SINGLE-CRYSTAL FIBERS BY THE LASER-HEATED PEDESTAL GROWTH METHOD** *JOURNAL OF CRYSTAL GROWTH*
  Tang, D. Y., Route, R. K., Feigelson, R. S.
  1988; 91 (1-2): 81-89

• **LASER-HEATED PEDESTAL GROWTH OF HIGH-TC BI-SR-CA-CU-O SUPERCONDUCTING FIBERS** *JOURNAL OF CRYSTAL GROWTH*
  Gazit, D., Feigelson, R. S.
  1988; 91 (3): 318-330

• **PROCEEDINGS OF THE 2ND INTERNATIONAL-CONFERENCE ON PROTEIN CRYSTAL-GROWTH - BISCHENBERG, STRASBOURG, FRANCE, 19-25 JULY 1987 - PREFACE** *JOURNAL OF CRYSTAL GROWTH*
  Giege, R., Ducruix, A., FONTECILLACAMPS, J. C., Feigelson, R. S., Kern, R., McPherson, A.
THE RELEVANCE OF SMALL MOLECULE CRYSTAL-GROWTH THEORIES AND TECHNIQUES TO THE GROWTH OF BIOLOGICAL MACROMOLECULES *Journal of Crystal Growth*  
Feigelson, R. S.  
1988; 90 (1-3): 1-13

SOME IMPLICATIONS OF COLLOID STABILITY THEORY FOR PROTEIN CRYSTALLIZATION *Journal of Crystal Growth*  
Young, C. C., DeMattei, R. C., Feigelson, R. S., Tiller, W. A.  
1988; 90 (1-3): 79-85

SUPERCONDUCTING BI-CA-SR-CU-O FIBERS GROWN BY THE LASER-HEATED PEDESTAL GROWTH METHOD *Science*  
Feigelson, R. S., Gazit, D., Fork, D. K., Geballe, T. H.  
1988; 240 (4859): 1642-1645

PURIFICATION OF MATERIALS FOR CRYSTAL-GROWTH AND GLASS PROCESSING - PROCEEDINGS OF THE 2ND WORKSHOP ON PURIFICATION OF MATERIALS FOR CRYSTAL-GROWTH AND GLASS PROCESSING, CHAMPION, PA, 28 SEPTEMBER - 1 OCTOBER 1987 - PREFACE *Journal of Crystal Growth*  
Hopkins, R. H., KLEIN, P. H., Feigelson, R. S.  
1988; 89 (1): R9-R11

ETCHING ON POLAR (111) SURFACES OF CDTE CRYSTALS STUDIED WITH AUGER-ELECTRON SPECTROSCOPY *Journal of Applied Physics*  
Lu, Y. C., Stahle, C. M., Feigelson, R. S., Morimoto, J.  
1987; 62 (11): 4453-4459

STOICHIOMETRIC LINBO3 SINGLE-CRYSTAL FIBERS FOR NONLINEAR OPTICAL APPLICATIONS *Journal of Crystal Growth*  
LUH, Y. S., Fejer, M. M., Byer, R. L., Feigelson, R. S.  
1987; 85 (1-2): 264-269

2ND HARMONIC-GENERATION AND ACCURATE INDEX OF REFRACTION MEASUREMENTS IN FLUX-GROWN KTiOPO4 *Applied Optics*  
1987; 26 (12): 2390-2394

LOW-FREQUENCY VIBRATIONAL STIRRING - A NEW METHOD FOR RAPIDLY MIXING SOLUTIONS AND MELTS DURING GROWTH *Journal of Crystal Growth*  
Liu, W. S., Wolf, M. F., Elwell, D., Feigelson, R. S.  
1987; 82 (4): 589-597

DETERMINATION OF CRYSTALLOGRAPHIC POLARITY OF CDTE CRYSTALS WITH AUGER-ELECTRON SPECTROSCOPY *Journal of Applied Physics*  
Lu, Y. C., Stahle, C. M., Morimoto, J., BUBE, R. H., Feigelson, R. S.  
1987; 61 (3): 924-927

RECENT DEVELOPMENTS IN THE GROWTH OF CHALCOPYRITE CRYSTALS FOR NONLINEAR INFRARED APPLICATIONS *Optical Engineering*  
Feigelson, R. S., Route, R. K.  
1987; 26 (2): 113-119

RESEARCH ON NONLINEAR OPTICAL-MATERIALS - AN ASSESSMENT *Applied Optics*  
1987; 26 (2): 211-234

V. Inorganic nonlinear materials for frequency conversion. *Applied optics*  
1987; 26 (2): 224-227

PULLING OPTICAL FIBERS *Journal of Crystal Growth*  
Feigelson, R. S.  
1986; 79 (1-3): 669-680
• FERROELECTRIC DOMAIN-STRUCTURES IN LINBO3 SINGLE-CRYSTAL FIBERS. *Journal of Crystal Growth*  
Lu, Y. S., Feigelson, R. S., Fejer, M. M., Byer, R. L.  
1986; 78 (1): 135-143

• PROTEIN CRYSTAL-GROWTH - PROCEEDINGS OF THE 1ST INTERNATIONAL-CONFERENCE ON PROTEIN CRYSTAL-GROWTH, STANFORD-UNIVERSITY, STANFORD, CA, USA, 14-16 AUGUST 1985 - PREFACE. *Journal of Crystal Growth*  
Feigelson, R. S.  
1986; 76 (3): 529-532

• A STUDY OF THE DEFECT STRUCTURES IN CDTE CRYSTALS USING SYNCHROTRON X-RAY TOPOGRAPHY. *Journal of Vacuum Science & Technology A*  
Lu, Y. C., Feigelson, R. S., Route, R. K., Rek, Z. U.  
1986; 4 (4): 2190-2194

• PULLING MICROCRYSTALS OF CO, FE AND CO-FE ALLOYS FROM THEIR MELTS. *Journal of Crystal Growth*  
Hayashi, S., KWAY, W. L., Feigelson, R. S.  
1986; 75 (3): 459-465

• PROCEEDINGS OF THE WORKSHOP ON PURIFICATION OF MATERIALS FOR CRYSTAL-GROWTH AND GLASS PROCESSING, WATSONVILLE, CA, 14-17 MAY 1985 - PREFACE. *Journal of Crystal Growth*  
Feigelson, R. S.  
1986; 75 (1): U1-U2

• OPTICAL SPECTROSCOPY OF MN2SiO4 CRYSTALS. *Journal of Chemical Physics*  
Powell, R. C., Elouadi, B., Xi, L., Loiacono, G. M., Feigelson, R. S.  
1986; 84 (2): 657-661

• INTERFACE SHAPE DURING BRIDGMAN GROWTH OF CSCDCL3. *Journal of Crystal Growth*  
Cheng, G. C., Elwell, D., Feigelson, R. S., Huang, C. E.  
1985; 73 (3): 417-424

• GROWTH OF UREA CRYSTALS BY PHYSICAL VAPOR TRANSPORT. *Journal of Crystal Growth*  
Feigelson, R. S., Route, R. K., Kao, T. M.  
1985; 72 (3): 585-594

• EFFICIENT 2ND HARMONIC-GENERATION OF 10-MU-M RADIATION IN AGGASE2. *Applied Physics Letters*  
Eckardt, R. C., Fan, Y. X., Byer, R. L., Route, R. K., Feigelson, R. S., VANDERLAAN, J.  
1985; 47 (8): 786-788

• PREFERENTIAL ION LOCATION AND STRUCTURAL STABILITY IN CSCDCL3. *Journal of Physics and Chemistry of Solids*  
BENSEKRANE, M., Goltzene, A., Meyer, B., Schwab, C., Elwell, D., Feigelson, R. S.  
1985; 46 (4): 481-486

• SINGLE-CRYSTAL FIBERS BY THE LASER-HEATED PEDESTAL GROWTH METHOD. *Optical Engineering*  
Feigelson, R. S., KWAY, W. L., Route, R. K.  
1985; 24 (6): 1102-1107

• IN SITU MEASUREMENTS OF COBALT SEGREGATION IN CSCDCL3. *Journal of Crystal Growth*  
Elwell, D., RAYMAKERS, R. J., Feigelson, R. S.  
1985; 71 (3): 509-513

• ETCH PIT STUDIES IN CDTE CRYSTALS. *Journal of Vacuum Science & Technology A - Vacuum Surfaces and Films*  
Lu, Y. C., Route, R. K., Elwell, D., Feigelson, R. S.  
1985; 3 (1): 264-270

• INTERFACE STUDIES DURING VERTICAL BRIDGMAN CDTE CRYSTAL-GROWTH. *Journal of Crystal Growth*  
Route, R. K., Wolf, M., Feigelson, R. S.  
1984; 70 (1-2): 379-385

• CRYSTAL-GROWTH OF GAN BY THE REACTION BETWEEN GALLIUM AND AMMONIA. *Journal of Crystal Growth*
Elwell, D., Feigelson, R. S., SIMKINS, M. M., Tiller, W. A.
1984; 66 (1): 45-54

- **COMPUTATION OF STRESS IN BRIDGMAN CRYSTALS** *JOURNAL OF CRYSTAL GROWTH*
  Huang, C. E., Elwell, D., Feigelson, R. S.
  1984; 69 (2-3): 275-280

  Feigelson, R. S.
  1984; 70 (1-2): R11-R14

- **SINGLE-CRYSTAL FIBERS BY THE LASER-HEATED PEDESTAL GROWTH METHOD** *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS*
  Feigelson, R. S., KWAY, W. L., Route, R. K.
  1984; 484: 133-141

- **ELECTRON-PARAMAGNETIC-RES STUDY OF A CR+ CENTER IN A TETRAHEDRAL COMPOUND WITH BUILT-IN UNIAXIAL DISTORTION** *AGGAS2 JOURNAL OF PHYSICS C-SOLID STATE PHYSICS*
  VONBARDELEBEN, H. J., Schwab, C., Feigelson, R. S., Route, R. K.
  1984; 17 (23): 4201-4206

- **AGGAS2 INFRARED PARAMETRIC OSCILLATOR** *APPLIED PHYSICS LETTERS*
  Fan, Y. X., Eckardt, R. C., Byer, R. L., Route, R. K., Feigelson, R. S.
  1984; 45 (4): 313-315

- **LOW-TEMPERATURE ELECTROSYNTHESIS OF TANTALUM AND NIOBium MONOCARBIDES** *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  HOCKMAN, A. J., Feigelson, R. S.
  1983; 130 (1): 221-224

- **CO2- AND MN2+ ION LOCATIONS IN DOPED CSCDCL3** *NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA D-CONDENSED MATTER ATOMIC MOLECULAR AND CHEMICAL PHYSICS FLUIDS PLASMAS BIOPHYSICS*
  BENSEKRANE, M., Goltzene, A., Meyer, B., Schwab, C., Elwell, D., Feigelson, R. S.
  1983; 2 (6): 1767-1774

- **MICROSCOPIC SCATTERING CENTERS IN AGGAS2** *NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA D-CONDENSED MATTER ATOMIC MOLECULAR AND CHEMICAL PHYSICS FLUIDS PLASMAS BIOPHYSICS*
  Koch, R., Route, R. K., Feigelson, R. S.
  1983; 2 (6): 1767-1774

- **INFLUENCE OF THERMAL-CONDUCTIVITY ON INTERFACE SHAPE DURING BRIDGMAN GROWTH** *JOURNAL OF CRYSTAL GROWTH*
  Huang, C. E., Elwell, D., Feigelson, R. S.
  1983; 64 (3): 441-447

- **THE MORPHOLOGY OF SILICON ELECTRODEPOSITS ON GRAPHITE SUBSTRATES** *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  Elwell, D., Feigelson, R. S., Rao, G. M.
  1983; 130 (5): 1021-1025

- **ELECTRODEPOSITION OF SOLAR SILICON** *SOLAR ENERGY MATERIALS*
  Elwell, D., Feigelson, R. S.
  1982; 6 (2): 123-145

- **CHARACTERIZATION OF ELECTRODEPOSITED SILICON ON GRAPHITE** *SOLAR ENERGY MATERIALS*
  Rao, G. M., Elwell, D., Feigelson, R. S.
  1982; 7 (1): 15-21

- **ELASTIC-CONSTANTS OF FEF2 BETWEEN 1.5 K AND 298 K** *PHYSICAL REVIEW B*
  Wu, A. Y., Sladek, R. J., Feigelson, R. S.
  1982; 26 (4): 1507-1511
• **ELECTRODEPOSITION OF SILICON-CARBIDE** *MATERIALS RESEARCH BULLETIN*
  Elwell, D., Feigelson, R. S., SIMKINS, M. M.
  1982; 17 (6): 697-706

• **ELECTRODEPOSITION OF SILICON ONTO GRAPHITE** *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  Monnier, R., Rao, G. M., Elwell, D., Feigelson, R. S.
  1982; 129 (12): 2867-2868

• **GROWTH AND CHARACTERIZATION OF SINGLE-CRYSTAL REFRACATORY OXIDE FIBERS** *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS*
  Fejer, M., Byer, R. L., FEIGELSON, R., KWAY, W.
  1982; 320: 50-55

• **ELECTRON-PARAMAGNETIC RESONANCE STUDY OF CO2+ IN AGGAS2** *JOURNAL OF PHYSICS C-SOLID STATE PHYSICS*
  VONBARDELEBEN, H. J., Schwab, C., Feigelson, R. S.

• **ELASTIC BEHAVIOR OF THE CHALCOPYRITE CDGEAS2** *JOURNAL OF PHYSICS C-SOLID STATE PHYSICS*
  HAILING, T., Saunders, G. A., LAMBSON, W. A., Feigelson, R. S.
  1982; 15 (7): 1399-1418

• **ELECTRODEPOSITION OF SILICON ONTO GRAPHITE** *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  Rao, G. M., Elwell, D., Feigelson, R. S.
  1981; 128 (8): 1708-1711

• **DEEP CENTER CHARACTERIZATION BY OPTICALLY CONTROLLED PARAMAGNETIC-RESONANCE IN AGGAS2** *JOURNAL OF APPLIED PHYSICS*
  VONBARDELEBEN, H. J., Goltzene, A., Schwab, C., Feigelson, R. S.
  1981; 52 (8): 5037-5042

• **ELECTRODEPOSITION OF INDIUM-PHOSPHIDE** *JOURNAL OF CRYSTAL GROWTH*
  Elwell, D., Feigelson, R. S., SIMKINS, M. M.
  1981; 51 (2): 171-177

• **EFFICIENT 2ND-HARMONIC GENERATION OF ND-YAG LASER-RADIATION USING WARM PHASEMATCHING LINBO3** *APPLIED PHYSICS LETTERS*
  Byer, R. L., Park, Y. K., Feigelson, R. S., KWAY, W. L.

• **ELECTRODEPOSITION OF SILICON AT TEMPERATURES ABOVE ITS MELTING-POINT** *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  DeMattei, R. C., Elwell, D., Feigelson, R. S.
  1981; 128 (8): 1712-1714

• **SINGLE-CRYSTAL GROWTH OF ZN3P2** *JOURNAL OF CRYSTAL GROWTH*
  Wang, F. C., BUBE, R. H., Feigelson, R. S., Route, R. K.

• **ELECTROCOATING OF SILICON AND ITS DEPENDENCE ON THE TIME OF ELECTROLYSIS** *SURFACE TECHNOLOGY*
  Rao, G. M., Elwell, D., Feigelson, R. S.
  1981; 13 (4): 331-337

• **PHASE-EQUILIBRIUM IN THE CDSE-TLSE SYSTEM** *MATERIALS RESEARCH BULLETIN*
  Borshchevsky, A., Feigelson, R. S.
  1980; 15 (10): 1367-1370

• **EFFECTS OF HEAT PRETREATMENT OF STARTING MATERIALS ON THE OPTICAL TRANSPARENCY OF CDGEAS2 CRYSTALS** *MATERIALS RESEARCH BULLETIN*
  BORSHCHEVSKY, A. S., Route, R. K., Feigelson, R. S.
• CRYSTAL-GROWTH OF CESIUM CADMIUM CHLORIDE CSCDCl3 *JOURNAL OF CRYSTAL GROWTH*
  Ahn, K. S., CARRANZA, R. A., Elwell, D., Feigelson, R. S.
  1980; 50 (4): 775-778

• HEAVY-METAL TERNARY COMPOUNDS FOR INFRARED ACOUSTOOPTIC APPLICATIONS *JAPANESE JOURNAL OF APPLIED PHYSICS*
  FEIGELSON, R.
  1980; 19 (3): 371-376

• ELECTROWINNING OF SILICON FROM K2SIF6-MOLTEN FLUORIDE SYSTEMS *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*
  Rao, G. M., Elwell, D., Feigelson, R. S.
  1980; 127 (9): 1940-1944

• VERTICAL BRIDGMAN GROWTH OF CDGEAS2 WITH CONTROL OF INTERFACE SHAPE AND ORIENTATION *JOURNAL OF CRYSTAL GROWTH*
  Feigelson, R. S., Route, R. K.
  1980; 49 (2): 261-273

• DEEP LEVEL STUDY IN AGGAS2 BY THERMALLY STIMULATED CURRENT MEASUREMENTS *PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE*
  VONBARDELEBEN, H. J., Schwab, C., SCHARAGER, C., Muller, J. C., Siffert, P., Feigelson, R. S.
  1980; 58 (1): 143-148

• ELECTRON-PARAMAGNETIC RESONANCE OF AN IRON-ASSOCIATED DEFECT IN AGGAS2 *PHYSICAL REVIEW B*
  VONBARDELEBEN, H. J., Goltzene, A., Schwab, C., Feigelson, R. S.
  1980; 21 (5): 1757-1762

• NEW PHASES IN THE CD-GE-AS SYSTEM *MATERIALS RESEARCH BULLETIN*
  PAMPLIN, B. R., Feigelson, R. S.
  1979; 14 (2): 263-266

• SPRAY PYROLYSIS OF CUITSE2 AND RELATED TERNARY SEMICONDUCTING COMPOUNDS *THIN SOLID FILMS*
  PAMPLIN, B., Feigelson, R. S.
  1979; 60 (2): 141-146

• SPRAY PYROLYSIS OF COMPLEX SPHALERITE MATERIALS *MATERIALS RESEARCH BULLETIN*
  PAMPLIN, B. R., Feigelson, R. S.
  1979; 14 (1): 1-4

• EPR CHARACTERIZATION OF OPTICAL-QUALITY AGGAS2 GROWN FROM MELT *APPLIED PHYSICS LETTERS*
  VONBARDELEBEN, H. J., Goltzene, A., Schwab, C., Feigelson, R. S.
  1978; 32 (11): 741-744

• CONDITIONS FOR STABLE GROWTH OF EPITAXIAL GAP LAYERS BY MOLTEN-SALT ELECTRODEPOSITION *JOURNAL OF CRYSTAL GROWTH*
  DeMattei, R. C., Elwell, D., Feigelson, R. S.
  1978; 44 (5): 545-552

• GROWTH-RATE LIMITATIONS IN ELECTROCHEMICAL CRYSTALLIZATION *JOURNAL OF CRYSTAL GROWTH*
  DeMattei, R. C., Feigelson, R. S.
  1978; 44 (2): 115-120

• 2-6 SOLID-SOLUTION FILMS BY SPRAY PYROLYSIS *JOURNAL OF APPLIED PHYSICS*
  Feigelson, R. S., Ndiaye, A., Yin, S. Y., BUBE, R. H.
  1977; 48 (7): 3162-3164

• CRYSTAL-GROWTH BY ELECTROCHEMICAL CZOCHRALSKI TECHNIQUE (ECT) *JOURNAL OF CRYSTAL GROWTH*
  DeMattei, R. C., Huggins, R. A., Feigelson, R. S.
  1976; 34 (1): 1-10

• ELIMINATION OF OPTICAL SCATTERING DEFECTS IN AGGAS2 AND AGGASE2 *JOURNAL OF CRYSTAL GROWTH*
  1976; 33 (2): 239-245

• DC Resistances in Electrolytic Crystallization from Molten-Salts. *Journal of Crystal Growth*, Zubeck, I. V., Feigelson, R. S., Huggins, R. A.
  1976; 34 (1): 85-91

  1976; 33 (2): 232-238

• Solution Growth of CdGeAs2. *Journal of Crystal Growth*, Feigelson, R. S., Route, R. K., Swarts, H. W.
  1975; 28 (1): 138-144

  1974; 12 (4): 427-429

  1974; 24 (2): 65-68

• Growth of Aggase2 for Infrared Applications. *Journal of Crystal Growth*, Route, R. K., Feigelson, R. S., Raymaker, R. J.
  1974; 24 (OCT): 390-395