



Robert Feigelson

Professor (Research) of Materials Science and Engineering, Emeritus

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Materials Science and Engineering

Publications

PUBLICATIONS

- **Crystal growth History: Theory and melt growth processes** *JOURNAL OF CRYSTAL GROWTH*
Feigelson, R. S.
2022; 594
- **Field-tuned ferroquadrupolar quantum phase transition in the insulator TmVO₄.** *Proceedings of the National Academy of Sciences of the United States of America*
Massat, P., Wen, J., Jiang, J. M., Hristov, A. T., Liu, Y., Smaha, R. W., Feigelson, R. S., Lee, Y. S., Fernandes, R. M., Fisher, I. R.
2022; 119 (28): e2119942119
- **High speed growth of SrI₂ scintillator crystals by the EFG process** *JOURNAL OF CRYSTAL GROWTH*
Calvert, G., Gugushev, 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*
Gugushev, C., Calvert, G., Podowitz, S., Vailionis, 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: 993-99
- **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 ENGINEERING.2013

- **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*
Setyawan, W., Gaume, R. M., Lam, S., Feigelson, R. S., Curtarolo, S.
2011; 13 (4): 382-390
- **Fabrication and Properties of Translucent SrI₂ and Eu:SrI₂ 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*
Patel, A. P., Levy, M. R., Grimes, R. W., Gaume, R. M., Feigelson, R. S., McClellan, K. J., Stanek, C. R.
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-VCH 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 CdGeAs₂** *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** *3rd International Symposium on Lasers and Nonlinear Optical Materials*
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*
Stevens, K. T., Garces, N. Y., Ba, L. H., Giles, N. C., Halliburton, L. E., Setzler, S. D., Schunemann, P. G., Pollak, T. M., Route, R. K., Feigelson, R. S.
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 CdGeAs₂(2)** *Conference on Nonlinear Frequency Generation and Conversion*
Bai, L., Garces, N. Y., Xu, C. C., Halliburton, L. E., Giles, N. C., Shunemann, 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 Pb_{0.5}Ba_{0.5}Nb₂O₆** *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.
2002; 91 (4): 1973-1977
- **Thermal gradient control at the solid-liquid interface in the laser-heated pedestal growth technique** *JOURNAL OF CRYSTAL GROWTH*
Andreeta, M. R., Andreeta, 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., Borshchevsky, 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*
DeMattei, 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(Mg_{1/3}Nb_{2/3})O-3 and Pb(Mg_{1/3}Nb_{2/3})O-3-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
- **Thermoelectric Properties of Some Phosphide Skutterudite Materials** *JAPANESE JOURNAL OF APPLIED PHYSICS*
Watcharapasorn, A., Demattei, R. C., Feigelson, R. S., Caillat, T., Borshchevsky, 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., Borshchevsky, 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(Mg_{1/3}Nb_{2/3})O₃ crystals** *APPLIED PHYSICS LETTERS*
LEE, S. G., Monteiro, R. G., Feigelson, R. S., Lee, H. S., Lee, M., Park, S. E.
1999; 74 (7): 1030-1032
 - **Growth of lead barium niobate (Pb_{1-x}Ba_xNb₂O₆) crystals by the vertical Bridgman method II. Sr_{0.61}Ba_{0.39}Nb₂O₆-seeded growth** *JOURNAL OF CRYSTAL GROWTH*
Lee, M. K., Feigelson, R. S.
1998; 193 (3): 355-363
 - **Growth of lead barium niobate (Pb_{1-x}Ba_xNb₂O₆) 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 Sr_{0.6}Ba_{0.4}Nd₂O₆ 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*
Ando, Y., Takeya, J., Sisson, D. L., Doettinger, S. G., Tanaka, I., Feigelson, R. S., Kapitulnik, A.
1998; 58 (6): R2913-R2916
 - **Infrared OH- absorptions in Sr_{0.61}Ba_{0.39}Nb₂O₆ crystals** *JOURNAL OF APPLIED PHYSICS*
Lee, M., Lee, H. S., Feigelson, R. S.
1998; 84 (3): 1558-1560
 - **16- μ m infrared generation by difference-frequency mixing in diffusion-bonded-stacked GaAs** *OPTICS LETTERS*
Zheng, D., Gordon, L. A., Wu, Y. S., Feigelson, R. S., Fejer, M. M., Byer, R. L., Vodopyanov, K. L.
1998; 23 (13): 1010-1012
 - **Photorefractive properties of tungsten bronze ferroelectric lead barium niobate (Pb_{1-x}Ba_xNb₂O₆) 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*
Wu, Y. S., Feigelson, R. S., Route, R. K., Zheng, D., Gordon, L. A., Fejer, M. M., Byer, R. L.
1998; 83 (10): 5552-5554
 - **Ferroelectric properties of tetragonal lead barium niobate (Pb_{1-x}Ba_xNb₂O₆) 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**
Wu, Y. S., Feigelson, R. S., Route, R. K., Zheng, D., Gordon, L. A., Fejer, M. M., Byer, R. L.
1998; 145 (1): 366-371
- **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., Kumbhakar, 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**
Zheng, D., Gordon, L. A., Wu, Y. S., Route, R. K., Fejer, M. M., Byer, R. L., Feigelson, R. S.
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.
SPIE - INT SOC OPTICAL ENGINEERING.1996: 178-185
- **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.
SPIE - INT SOC OPTICAL ENGINEERING.1996: 168-173
- **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**
Steiner, M., Potzel, W., KOFFERLEIN, M., Karzel, H., Schiessl, W., Kalvius, G. M., Mitchell, D. W., Sahoo, N., Klauss, H. H., Das, T. P., Feigelson, R. S., Schmidt, G.
1994; 50 (18): 13355-13363
- **EPITAXIAL LINBO₃ THIN-FILMS ON SAPPHIRE SUBSTRATES GROWN BY SOLID SOURCE MOCVD JOURNAL OF MATERIALS RESEARCH**
Lu, Z., Hiskes, R., DICAROLIS, S. A., Route, R. K., Feigelson, R. S., Leplingard, F., Fouquet, J. E.
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.
1994; 27 (2): 231-234
- **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)*
Steiner, M., KOFFERLEIN, M., Potzel, W., Karzel, H., Schiessl, W., Kalvius, G. M., Mitchell, D. W., Sahoo, N., Klauss, H. H., Das, T. P., Feigelson, R. S., Schmidt, G.
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*
Gordon, L., Woods, G. L., Eckardt, R. C., ROUTE, R. R., Feigelson, R. S., Fejer, M. M., Byer, R. L.
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., Dignonnet, 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 SUPERLATTICES 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., Perrotta, A. J., Feigelson, R. S.
1991; 10 (24): 1428-1429
- **PROCESSING OF B12.1SR1.8CA1.1CU2O8 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.
1991; 53 (1): 19-22
- **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 BI₂SR₂CACU₂O_X 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.
1990; 20 (1-2): 115-160
 - **INFLUENCE OF STARTING MATERIAL ON BI₂SR₂CACU₂O₈ 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.
1989; 25 (2): 2014-2016
 - **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.
1988; 90 (1-3): R9-R9
 - **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 KTIPO4** *APPLIED OPTICS*
Fan, T. Y., Huang, C. E., Hu, B. Q., Eckardt, R. C., Fan, Y. X., Byer, R. L., Feigelson, R. S.
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*

- Dagenais, M., AUSTON, D. H., Ballman, A. A., Bhattacharya, P., BJORKLUND, G. J., Bowden, C., Boyd, R. W., Brody, P. S., Burnham, R., Byer, R. L., Carter, G., Chemla, D., DOHLER, et al
1987; 26 (2): 211-234
- **V. Inorganic nonlinear materials for frequency conversion.** *Applied optics*
Ballman, A. A., Byer, R. L., Eimerl, D., Feigelson, R. S., Feldman, B. J., Goldberg, L. S., Menyuk, N., Tang, C. L.
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*
LUH, 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
 - **INSITU 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
- **VAPOR GROWTH AND EPITAXY 1984 - AMERICAN CRYSTAL-GROWTH 1984 - PROCEEDINGS OF THE COMBINED MEETING ICVGE-6/ACCG-6 ATLANTIC-CITY, NJ, USA, 15-20 JULY 1984 - PREFACE** *JOURNAL OF CRYSTAL GROWTH*
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
- **CO-2+ AND MN-2+ 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): 1964-1970
- **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 REFRACTORY 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.
1982; 15 (25): 5269-5273
 - **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.
1981; 39 (1): 17-19
 - **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.
1981; 55 (2): 268-272
 - **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.
1980; 15 (4): 409-414
- **CRYSTAL-GROWTH OF CESIUM CADMIUM CHLORIDE CSDCL3** *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 CUINSE2 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*
Route, R. K., Feigelson, R. S., RAYMAKERS, R. J., Choy, M. M.
1976; 33 (2): 239-245
- **GROWTH OF LANTHANUM HEXABORIDE SINGLE-CRYSTALS BY MOLTEN-SALT ELECTROLYSIS** *JOURNAL OF CRYSTAL GROWTH*
ZUBECK, I. V., Feigelson, R. S., Huggins, R. A., PETTIT, P. A.
1976; 34 (1): 85-91
- **DC RESISTANCES IN ELECTROLYTIC CRYSTALLIZATION FROM MOLTEN-SALTS** *JOURNAL OF CRYSTAL GROWTH*
Elwell, D., DeMattei, R. C., ZUBECK, I. V., Feigelson, R. S., Huggins, R. A.
1976; 33 (2): 232-238
- **SURFACE-STRUCTURE AND ELECTROLYTIC GROWTH STABILITY OF LAB6 CRYSTALS** *JOURNAL OF CRYSTAL GROWTH*
Elwell, D., ZUBECK, I. V., Feigelson, R. S., Huggins, R. A.
1975; 29 (1): 65-68
- **SOLUTION GROWTH OF CDGEAS2** *JOURNAL OF CRYSTAL GROWTH*
Feigelson, R. S., Route, R. K., SWARTS, H. W.
1975; 28 (1): 138-144
- **GROWTH AND APPLICATION OF [01.4] LINBO3** *OPTICS COMMUNICATIONS*
Byer, R. L., HERBST, R. L., Feigelson, R. S., KWAY, W. L.
1974; 12 (4): 427-429
- **SECOND-HARMONIC GENERATION AND INFRARED MIXING IN AGGASE2** *APPLIED PHYSICS LETTERS*
Byer, R. L., Choy, M. M., HERBST, R. L., Chemla, D. S., FEIGELSO, R. S.
1974; 24 (2): 65-68
- **GROWTH OF AGGASE2 FOR INFRARED APPLICATIONS** *JOURNAL OF CRYSTAL GROWTH*
Route, R. K., FEIGELSO, R. S., RAYMAKER, R. J.
1974; 24 (OCT): 390-395

PRESENTATIONS

- The Preparation and Orientation of EFG Grown SrI2 Crystals - 8th International Symposium on Optical Materials (6/9/2019 - 6/14/2019)