

Luiz Gustavo Jacobsohn - Curriculum Vitae

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Last update: May 31, 2024

□ Book Chapters

1. *Structure and mechanical properties of boron carbide films deposited by sputtering*
L.G. Jacobsohn
Invited chapter to volume *Diamond and Related Materials Research* edited by Shôta Shimizu (Nova Science Publishers, 2008, New York, ISBN 978-1-60456-145-6) chapter 5, pp. 181-191

□ Full Peer-Reviewed Publications (147 total)

1. *Unlocking arene phosphorescence in bismuth-organic materials*
A.C. Marwitz, A.K. Dutta, R.L. Conner, **L.G. Jacobsohn**, K.E. Knope
Accepted for publication in *Inorganic Chemistry* (2024)
2. *High-density glass scintillators for proton radiography - relative luminosity, proton response, and spatial resolution*
E. Stolen, R. Fullarton, R. Hein, R.L. Conner, **L.G. Jacobsohn**, C.-A.C. Fekete, S. Beddar, U. Akgun, and D. Robertson
Special Issue: Radiation Detectors and Sensing Technologies for Biomedical Applications
Sensors **24**, 2137 (13 pages) (2024)
DOI: 10.3390/s24072137
3. *Photoluminescence and X-ray induced scintillation in Gd³⁺-Tb³⁺ co-doped fluoride-phosphate glasses, and derived glass-ceramics containing NaGdF₄ nanocrystals*
G. Galleani, T.A. Lodi, R.L. Conner, **L.G. Jacobsohn**, A.S. S. de Camargo
Optical Materials: X **21**, 100288 (9 pages) (2024) – invited
DOI: 10.1016/j.omx.2023.100288
4. *Radiation response properties of Ce-doped CaF₂ transparent ceramics*
N. Kawano, T. Kato, R.L. Conner, **L.G. Jacobsohn**, D. Nakauchi, Y. Takebuchi, H. Fukushima, D. Shiratori, T. Yanagida
Materials Research Bulletin **171**, 112609 (8 pages) (2024)
DOI: 10.1016/j.materresbull.2023.112609
5. *TSL, OSL and scintillation properties of Tb-doped barium fluoride translucent ceramics*
N. Kawano, T. Kato, D. Nakauchi, Y. Takebuchi, H. Fukushima, D. Shiratori, **L.G. Jacobsohn**, and T. Yanagida
Optical Materials **141**, 113948 (6 pages) (2023)

DOI: 10.1016/j.optmat.2023.113948

6. *Dosimetric and scintillation properties of Tm-doped BaF₂ translucent ceramics*
N. Kawano, T. Kato, D. Nakauchi, Y. Takebuchi, H. Fukushima, **L.G. Jacobsohn**, and T. Yanagida
Journal of Materials Science: Materials in Electronics **34**, 962 (10 pages) (2023)
DOI: 10.1007/s10854-023-10343-8
7. *Back in bismuth: Controlling triplet energy transfer, phosphorescence, and radioluminescence via supramolecular interactions*
A.C. Marwitz, A.D. Nicholas, R.T. Magar, A.K. Dutta, J. Swanson, T. Hartman, J.A. Bertke, J.J. Rack, **L.G. Jacobsohn**, K.E. Knope
Journal of Materials Chemistry C **11**, 14848-14864 (2023)
DOI: 10.1039/D3TC02040A
8. *Luminescence of alkali rare earth borates A₃Ln(BO₃)₂ (A = Na, K; Ln = Eu, Tb)*
A.T. Hines, G. Morrison, B.J. Yarbrough, N.B. Shustova, **L.G. Jacobsohn**, and H.-C. zur Loye
Solid State Sciences **138**, 107130 (6 pages) (2023)
DOI: 10.1016/j.solidstatesciences.2023.107130
9. *Tunable salt-inclusion chalcogenides for ion-exchange, photoluminescence, and scintillation*
A. Berseneva, L. Masachchi, **L.G. Jacobsohn**, and H.-C. zur Loye
Chemistry of Materials **35**, 1417–1431 (2023) + supporting information
DOI: 10.1021/acs.chemmater.2c03592
10. *Semiconducting and scintillating glasses for X-ray detection*
B. Smith, J. Mucciaccio, T. Caplace, L. Wadle, L. McClanahan, **L.G. Jacobsohn**, and U. Akgun
Glass Technology: European Journal of Glass Science and Technology Part A **64**, 57-64 (2023)
DOI: 10.13036/17533546.64.2.04
11. *Tungsten gallium-phosphate glasses as promising intrinsic scintillators*
T.A. Lodi, G. Galleani, L.G. Merízio, **L.G. Jacobsohn**, V.R. Mastelaro, and A.S.S. de Camargo
Journal of Non-Crystalline Solids **603**, 122097 (7 pages) (2023)
DOI: 10.1016/j.jnoncrysol.2022.122097
12. *Fabrication of ceramic scintillators by laser sintering: the case of Lu₃Al₅O₁₂:Pr*
Y. Shao, R.L. Conner, N.R.S. Souza, R.S. Silva, and **L.G. Jacobsohn**
Invited paper in the Selected Topics in Applied Physics (STAP) issue "Recent Advances in Radiation-Induced Luminescence Materials"

- Japanese Journal of Applied Physics **62**, 010601 (7 pages) (2023)
DOI: 10.35848/1347-4065/ac9941
13. *Microstructure, luminescence and thermoluminescence of laser-sintered polycrystalline ceramic YAG:Ce scintillators*
A.A. Trofimov, J.C.A. Santos, D.V. Sampaio, R.S. Silva, T.A. DeVol, and **L.G. Jacobsohn**
Journal of Luminescence **251**, 119206 (9 pages) (2022)
DOI: 10.1016/j.jlumin.2022.119206
14. *Photoluminescence and X-ray induced scintillation in Gd³⁺-modified fluorophosphate glasses doped with Ce³⁺*
G. Galleani, T.A. Lodi, V.R. Mastelaro, **L.G. Jacobsohn**, and A.S.S. de Camargo
Optical Materials **133**, 112934 (6 pages) (2022)
DOI: 10.1016/j.optmat.2022.112934
15. *Luminescence and scintillation in the niobium-doped oxyfluoride Rb₄Ge₅O₉F₆:Nb*
D. Carone, V.V. Klepov, S.T. Misture, J.C. Schaeperkoetter, **L.G. Jacobsohn**, M. Aziziha, J. Schorne-Pinto, S.A.J. Thomson, A.T. Hines, T.M. Besmann, and H.-C. zur Loye
Inorganics **10**, 83 (12 pages) (2022) (Special Issue Inorganics: 10th Anniversary)
DOI: 10.3390/inorganics10060083
16. *The kinetic parameters of the main thermoluminescence glow peak of Al₂O₃:C,Mg: A critical evaluation of different analytical methods*
J.M. Munoz, E.M. Yoshimura, M.L. Chithambo, **L.G. Jacobsohn**, and N.M. Trindade
Journal of Luminescence **247**, 118848 (6 pages) (2022)
DOI: 10.1016/j.jlumin.2022.118848
17. *Synthesis, structure, and scintillation of Rb₄Ta₂Si₈O₂₃*
D. Carone, **L.G. Jacobsohn**, L.S. Breton, and H.-C. zur Loye
Solid State Sciences **127**, 106861 (5 pages) (2022)
DOI: 10.1016/j.solidstatesciences.2022.106861
18. *Luminescence and scintillation of [Nb₂O₂F₉]³⁻-dimer containing oxide-fluorides: Cs₁₀(Nb₂O₂F₉)₃F, Cs_{9.4}K_{0.6}(Nb₂O₂F₉)₃F, and Cs₁₀(Nb₂O₂F₉)₃Cl*
G.B. Ayer, G. Morrison, M.D. Smith, **L.G. Jacobsohn**, and H.-C. zur Loye
Inorganic Chemistry **61**, 3256-3262 (2022)
DOI: 10.1021/acs.inorgchem.1c03787
19. *Promising Tb³⁺-doped gallium tungsten-phosphate glass scintillator: spectroscopy, energy transfer, and UV/X-ray sensing*
T.A. Lodi, J.F.M. dos Santos, G. Galleani, **L.G. Jacobsohn**, T. Catunda, and A.S.S. de Camargo
Journal of Alloys and Compounds **904**, 164016 (10 pages) (2022)
DOI: 10.1016/j.jallcom.2022.164016

20. *Synthesis of hydrated ternary lanthanide-containing chlorides exhibiting X-ray scintillation and luminescence*
G.B. Ayer, M.D. Smith, **L.G. Jacobsohn**, G. Morrison, H.B. Tisdale, L.S. Breton, W. Zhang, P.S. Halasyamani, and H.-C. zur Loye
Inorganic Chemistry **60**, 15371–15382 (2021)
DOI: 10.1021/acs.inorgchem.1c02004
21. *Magnesium aluminate spinel for optically stimulated luminescence dosimetry*
L. Pan, S. Sholom, S.W.S. McKeever, and **L.G. Jacobsohn**
Journal of Alloys and Compounds **880**, 160503 (9 pages) (2021)
DOI: 10.1016/j.jallcom.2021.160503
22. *Comparative investigation of transparent polycrystalline ceramic and single crystal $\text{Lu}_3\text{Al}_5\text{O}_{12}:\text{Ce}$ scintillators: Microstructural and thermoluminescence analyses*
A.A. Trofimov, T.A. DeVol, and **L.G. Jacobsohn**
Journal of Luminescence **238**, 118229 (11 pages) (2021)
DOI: 10.1016/j.jlumin.2021.118229
23. *Low/Intermediate temperature pyrolyzed polysiloxane derived ceramics with increased carbon for electrical applications*
M. Greenough, Z. Zhao, **L.G. Jacobsohn**, J. Tong, and R.K. Bordia
Journal of the European Ceramic Society **41**, 5882-5889 (2021)
DOI: 10.1016/j.jeurceramsoc.2021.04.007
24. *OSL response of $\alpha\text{-Al}_2\text{O}_3:\text{C},\text{Mg}$ exposed to beta and UVC radiation: a comparative investigation*
J.M. Munoz, L.S. Lima, E.M. Yoshimura, **L.G. Jacobsohn**, and N.M. Trindade
Journal of Luminescence **236**, 118058 (7 pages) (2021)
DOI: 10.1016/j.jlumin.2021.118058
25. *Fluorophosphate glasses doped with Eu^{3+} and Dy^{3+} for X-ray radiography*
I.C. Pinto, G. Galleani, **L.G. Jacobsohn**, Y. Ledemi, Y. Messaddeq, and A.S.S. de Camargo
Journal of Alloys and Compounds **863**, 158382 (8 pages) (2021)
DOI: 10.1016/j.jallcom.2020.158382
26. *Luminescence of undoped and Ce-doped hexagonal BiPO_4*
L. Pan, K. Koehler and **L.G. Jacobsohn**
Journal of Luminescence **228**, 117626 (9 pages) (2020)
DOI: 10.1016/j.jlumin.2020.117626
27. *Insights into the proton transport mechanism in TiO_2 simple oxides by in-situ Raman spectroscopy*
J. Gao, Y. Meng, A. Benton, J. He, **L.G. Jacobsohn**, J. Tong, K. Brinkman

ACS Applied Materials & Interfaces **12**, 38012-38018 (2020)

DOI: 10.1021/acsami.0c08120

28. *Characterization of the optically stimulated luminescence (OSL) response of beta-irradiated alexandrite-polymer composites*
M.C.S. Nunes, L.S. Lima, E.M. Yoshimura, L.V.S. França, O. Baffa, **L.G. Jacobsohn**, A.L.M.C. Maltez, R. Kunzel, and N.M. Trindade
Journal of Luminescence **226**, 117479 (6 pages) (2020)
DOI: 10.1016/j.jlumin.2020.117479
29. *Luminescence of ZnS:Ag scintillator prepared by the hydrothermal reaction method: effects of reaction temperature and time, Ag concentration, and co-doping with Al*
Y. Wu, Y. Shao and **L.G. Jacobsohn**
Optical Materials **107**, 110015 (7 pages) (2020)
DOI: 10.1016/j.optmat.2020.110015
30. *Scintillation, luminescence and optical properties of Ce-doped borosilicate glasses*
L. Pan, J.K.M.F. Daguano, N.M. Trindade, M. Cerruti, E.D. Zanotto, and **L.G. Jacobsohn**
Optical Materials **104**, 109847 (5 pages) (2020)
DOI: 10.1016/j.optmat.2020.109847
31. *Thermoluminescence of UV-irradiated α -Al₂O₃:C,Mg*
N.M. Trindade, M.G. Magalhães, M.C.S. Nunes, E.M. Yoshimura, and **L.G. Jacobsohn**
Journal of Luminescence **223**, 117195 (5 pages) (2020)
DOI: 10.1016/j.jlumin.2020.117195
32. *Radioluminescence of Lu₃Al₅O₁₂:Ce single crystal and transparent polycrystalline ceramic at high temperatures*
A.A. Trofimov, and **L.G. Jacobsohn**
Ceramics International **46**, 26335-26338 (2020)
DOI: 10.1016/j.ceramint.2019.12.247
33. *Luminescence of Ce-doped aluminophosphate glasses*
M.W. Kielty, L. Pan, M.A. Dettmann, V. Herrig, U. Akgun, and **L.G. Jacobsohn**
Journal of Materials Science: Materials in Electronics **30**, 16774-16780 (2019)
DOI: 10.1007/s10854-019-01301-4
34. *A glass neutron detector with machine learning capabilities*
G.L. Ademoski, S. Simko, M. Teeple, I. Morrow, P. Kralik, C.J. Wilkinson, G. Varney, M. Martinez-Szewczyk, L. Yinong, J.K. Nimmagadda, S. Samant, Y. Wu, L. Pan, **L.G. Jacobsohn**, Q. Wilkinson, F. Duru, and U. Akgun
Journal of Instrumentation **14**, P06013; 11 pages (2019)
DOI: 10.1088/1748-0221/14/06/P06013

35. *Progress and challenges towards the development of a new optically stimulated luminescence (OSL) material based on MgB₄O₇:Ce,Li*
T.D. Gustafson, E.D. Milliken, **L.G. Jacobsohn**, and E.G. Yukihiro
Journal of Luminescence **212**, 242-249 (2019)
DOI: 10.1016/j.jlumin.2019.04.028
36. *Effects of sintering temperature on the microstructure and luminescence of LuAG:Pr ceramics*
A.A. Trofimov, M.R. Marchewka, and **L.G. Jacobsohn**
Radiation Measurements **122**, 34-39 (2019)
DOI: 10.1016/j.radmeas.2019.01.005
37. *Luminescence of undoped commercial ZnS crystals: evidence on the role of impurities using photoluminescence and electrical transient spectroscopy*
M. Saleh, K. Lynn, **L.G. Jacobsohn**, and J.S. McCloy
Journal of Applied Physics **125**, 075702-1 to 21 (2019)
DOI: 10.1063/1.5084738
38. *Fabrication and characterization of ZnS:Ag-based ultrafiltration membrane scintillator*
Y. Wu, A.W. Darge, A.A. Trofimov, C. Li, K.S. Brinkman, S.M. Husson, and **L.G. Jacobsohn**
Optical Materials **88**, 424-428 (2019)
DOI: 10.1016/j.optmat.2018.12.009
39. *Laser sintering and photoluminescence study of Tb-doped yttrium aluminum garnet ceramics*
J.C.A. Santos, E.P. Silva, N.R.S. Souza, Y.G.S. Alves, D.V. Sampaio, C. Kucera, **L.G. Jacobsohn**, J. Ballato, and R.S. Silva
Ceramics International **45**, 3797-3802 (2019)
DOI: 10.1016/j.ceramint.2018.11.048
40. *Thermoluminescence and radioluminescence of alexandrite mineral*
N.M. Trindade, M.R. da Cruz, H. Kahn, **L.G. Jacobsohn**, and E.M. Yoshimura
Journal of Luminescence **206**, 455-461 (2019)
DOI: 10.1016/j.jlumin.2018.10.114
41. *Correlation between thermoluminescence and optically stimulated luminescence of α -Al₂O₃:C,Mg*
N.M. Trindade, **L.G. Jacobsohn**, and E.M. Yoshimura
Journal of Luminescence **206**, 298-301 (2019)
DOI: 10.1016/j.jlumin.2018.10.084
42. *Fabrication and characterization of a composite dosimeter based on natural alexandrite*

- N.M. Trindade, A.L.M.C. Malthez, A.C. Nascimento, R.S. Silva, **L.G. Jacobsohn**, and E.M. Yoshimura
Optical Materials **85**, 281-286 (2018)
DOI: 10.1016/j.optmat.2018.08.066
43. *Thermoluminescence and radioluminescence of α -Al₂O₃:C,Mg at high temperatures*
N.M. Trindade and **L.G. Jacobsohn**
Journal of Luminescence **204**, 598-602 (2018)
DOI: 10.1016/j.jlumin.2018.08.018
44. *Investigation of Ce³⁺ luminescence in borate-rich borosilicate glasses*
M.W. Kielty, M. Dettmann, V. Herrig, M.G. Chapman, M.R. Marchewka, A.A. Trofimov, U. Akgun, and **L.G. Jacobsohn**
Journal of Non-Crystalline Solids **471**, 357-361 (2017)
DOI: 10.1016/j.jnoncrysol.2017.06.022
45. *Radioluminescence and thermoluminescence of rare earth doped and co-doped YF₃*
L.G. Jacobsohn, C.L. McPherson, L.C. Oliveira, C.J. Kucera, J. Ballato, and E.G. Yukihara
Radiation Measurements **106**, 79-83 (2017)
DOI: 10.1016/j.radmeas.2017.05.001
46. *Permeation and optical properties of YAG:Er³⁺ fiber membrane scintillators prepared by novel sol-gel/electrospinning method*
Z. Chen, A.A. Trofimov, **L.G. Jacobsohn**, H. Xiao, K. Kornev, D. Xu, and F. Peng
Cover - Journal of Sol-Gel Science and Technology **83**, 35-43 (2017)
DOI: 10.1007/s10971-017-4387-y
47. *Laser sintering of persistent luminescent CaAl₂O₄:Eu²⁺Dy³⁺ ceramics*
N.R.S. Souza, D.C. Silva, D.V. Sampaio, M.V.S. Rezende, C. Kucera, A.A. Trofimov, **L.G. Jacobsohn**, J. Ballato, and R.S. Silva
Optical Materials **68**, 2-6 (2017)
DOI: 10.1016/j.optmat.2016.10.050
48. *Luminescence investigation of Ce incorporation in garnet-type Li₇La₃Zr₂O₁₂*
A.A. Trofimov, C. Li, K.S. Brinkman, and **L.G. Jacobsohn**
Optical Materials **68**, 7-10 (2017)
DOI: 10.1016/j.optmat.2016.09.058
49. *Direct inkjet printing of miniaturized luminescent YAG:Er³⁺ from sol-gel precursor*
Y. Hong, Z. Chen, A.A. Trofimov, J. Lei, J. Chen, L. Yuan, W. Zhu, H. Xiao, D. Xu, **L.G. Jacobsohn**, K.G. Kornev, R.K. Bordia, and F. Peng
Optical Materials **68**, 11-18 (2017)
DOI: 10.1016/j.optmat.2016.12.020

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50. *Incorporation of Pr into LuAG ceramics*
M.R. Marchewka, M.G. Chapman, H. Qian and **L.G. Jacobsohn**
Optical Materials **68**, 53-57 (2017)
DOI: 10.1016/j.optmat.2016.09.056

 51. *High-density scintillating glasses for a proton imaging detector*
I.J. Tillman, M.A. Dettman, V.V. Herrig, Z.L. Thune, A.J. Zieser, S.F. Michalek, M.O. Been, M.M. Martinez-Szewczyk, H.J. Koster, C.J. Wilkinson, M.W. Kielty, **L.G. Jacobsohn**, and U. Akgun
Optical Materials **68**, 58-62 (2017)
DOI: 10.1016/j.optmat.2016.10.015

 52. *Thick Er-doped silica films sintered using CO₂ laser for scintillation applications*
J. Lei, A.A. Trofimov, J. Chen, Z. Chen, Y. Hong, L. Yuan, W. Zhu, Q. Zhang, **L.G. Jacobsohn**, F. Peng, R.K. Bordia, and H. Xiao
Optical Materials **68**, 63-69 (2017)
DOI: 10.1016/j.optmat.2017.03.035

 53. *Effects of sintering temperature on open-volume defects and thermoluminescence of yttria and lutetia ceramics*
M.G. Chapman, R.C. Walker II, J.M. Schmitt, C.L. McPherson, F. Ameena, C.J. Kucera, C.A. Quarles, T.A. DeVol, J. Ballato, and **L.G. Jacobsohn**
Journal of the American Ceramic Society **99**, 1449-1454 (2016)
DOI: 10.1111/jace.14119

 54. *A neutron detector based on boron-10 enriched scintillating glasses*
D. Vu, M. Dettmann, V. Herrig, **L.G. Jacobsohn**, M.W. Kielty, J. Wetzel, Y. Onel, and U. Akgun
Additive Manufacturing and Strategic Technologies in Advanced Ceramics, Ceramic Transactions vol. **258**, 59-68 (2016)
DOI: 10.1002/9781119236016.ch6

 55. *Stability of grafted polymer nanoscale films toward gamma irradiation*
N. Borodinov, J. Giammarco, N. Patel, A. Agarwal, K.R. O'Donnell, C.J. Kucera, **L.G. Jacobsohn**, and I. Luzinov
ACS Applied Materials & Interfaces **7**, 19455-19465 (2015) (+ supplement S1-S5)
DOI: 10.1021/acsami.5b05863

 56. *Luminescence and scintillation enhancement of Y₂O₃:Tm transparent ceramic through post-fabrication thermal processing*
M.G. Chapman, M.R. Marchewka, S.A. Roberts, J.M. Schmitt, C. McMillen, C.J. Kucera, T.A. DeVol, J. Ballato, and **L.G. Jacobsohn**
Journal of Luminescence **165**, 56-61 (2015) + supplementary material
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57. *Investigation of Er-doped Sc₂O₃ transparent ceramics by positron annihilation spectroscopy*
L.G. Jacobsohn, K. Serivalsatit, C.A. Quarles, and J. Ballato
Journal of Materials Science **50**, 3183-3188 (2015)
DOI: 10.1007/s10853-015-8881-8
58. *Luminescence and thermal lensing characterization of singly Eu³⁺ and Tm³⁺ doped Y₂O₃ transparent ceramics*
P. Y. Poma, K. Upendra Kumar, M. V. D. Vermelho, K. Serivalsatit, S. A. Roberts, C. J. Kucera, J. Ballato, **L. G. Jacobsohn**, and C. Jacinto
Journal of Luminescence **161**, 306-312 (2015)
DOI: 10.1016/j.jlumin.2015.01.003
59. *Rare earth-doped nanocrystalline MgF₂: synthesis, luminescence and thermoluminescence*
L.G. Jacobsohn, A.L. Roy, C.L. McPherson, C.J. Kucera, L.C. Oliveira, E.G. Yukihara, and J. Ballato
Optical Materials **35**, 2461-2464 (2013)
DOI: 10.1016/j.optmat.2013.06.045
60. *Systematic development of new thermoluminescence and optically stimulated luminescence materials*
E.G. Yukihara, E.D. Milliken, L.C. Oliveira, V.R. Orante-Barrón, **L.G. Jacobsohn**, and M.W. Blair
Journal of Luminescence **133**, 203-210 (2013)
DOI: 10.1016/j.jlumin.2011.12.018
61. *Spectral engineering of LaF₃:Ce³⁺ nanoparticles: the role of Ce³⁺ in surface sites*
L.G. Jacobsohn, A. Toncelli, K.B. Sprinkle, C.J. Kucera, and J. Ballato
Journal of Applied Physics **111**, 074315 (5 pages) (2012)
DOI: 10.1063/1.3700343
62. *Electron energy-loss spectroscopy investigation of dopant homogeneity in Tb-doped Y₂O₃ nanoparticles prepared by solution combustion synthesis*
L.G. Jacobsohn, R. Wang, P. Crozier, B.L. Bennett and R.E. Muenchausen
Optical Materials **34**, 671-674 (2012)
DOI: 10.1016/j.optmat.2011.09.015
63. *Scintillation of rare earth doped fluoride nanoparticles*
L.G. Jacobsohn, C.L. McPherson, K.B. Sprinkle, E.G. Yukihara, T.A. DeVol and J. Ballato
Applied Physics Letters **99**, 113111 (3 pages) (2011)
DOI: 10.1063/1.3638484

64. *Synthesis, structure and scintillation of Ce-doped gadolinium oxyorthosilicate nanoparticles prepared by solution combustion synthesis*
L.G. Jacobsohn, S.C. Tornga, M.W. Blair, B.L. Bennett, R.E. Muenchausen, R. Wang, P.A. Crozier and D.W. Cooke
Journal of Applied Physics **110**, 083515 (7 pages) (2011)
DOI: 10.1063/1.3647304
65. *Fluoride nanoscintillators*
L.G. Jacobsohn, K.B. Sprinkle, S.A. Roberts, C.J. Kucera, T.L. James, E.G. Yukihara, T.A. DeVol and J. Ballato
Special issue "Nanocrystals-Related Synthesis, Assembly, and Energy Applications" of Journal of Nanomaterials **2011**, article ID 523638 (6 pages) (2011)
DOI: 10.1155/2011/523638
66. *Luminescence properties of MgO produced by solution combustion synthesis and doped with lanthanides and Li*
V.R. Orante-Barrón, L.C. Oliveira, J.B. Kelly, E.D. Milliken, G. Denis, M.W. Blair, **L.G. Jacobsohn**, J. Puckette, and E.G. Yukihara
Journal of Luminescence **131**, 1058-1065 (2011)
DOI: 10.1016/j.jlumin.2011.01.022
67. *Structural and optical properties of rare earth-doped $(Ba_{0.77}Ca_{0.23})_{1-x}RE_xTiO_3$ ($RE = Sm, Nd, Pr, Yb$)*
A.P.A. Moraes, P.T.C. Freire, J. Mendes Filho, A.G. Souza Filho, J.C.M'Peko, A.C. Hernandez, E. Antonelli, **L.G. Jacobsohn**, Michael W. Blair, Ross E. Muenchausen, and W. Paraguassu
Journal of Applied Physics **109**, 124102 (8 pages) (2011)
DOI: 10.1063/1.3594710
68. *Synthesis, luminescence and scintillation of rare earth doped lanthanum fluoride nanoparticles*
L.G. Jacobsohn, K.B. Sprinkle, C.J. Kucera, T.L. James, S.A. Roberts, H. Qian, E.G. Yukihara, T.A. DeVol and J. Ballato
Optical Materials **33**, 136-140 (2010)
69. *Luminescence properties of Ce-doped oxyorthosilicate nanophosphors and single crystals*
E.G. Yukihara, **L.G. Jacobsohn**, M.W. Blair, B.L. Bennett, S.C. Tornga and R.E. Muenchausen
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4. *Photonic crystals for enhanced light outcoupling of scintillation based detectors*
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▣ Reports

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E.G. Yukihara, J.J. Talghader, **L.G. Jacobsohn**, and J. Ballato

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2. *Strategy for enhanced light output from luminescent nanoparticles*

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