

# Diana Lucia Quintero Castro

## PUBLICATION LIST

November 2022, total peer-reviewed papers 30, total citations 608, h-index: 12

PEER-REVIEWED JOURNAL ARTICLES	Citations
1. Correlated disorder and crystal structure of b-VOSO4 Fuller, C.A., <b>Quintero-Castro, D.L.</b> , Bosak, A., Dyadkin, V. & Chernyshov, D. Acta Cryst. B, 78, (2022)	0
2. Crystal field effects in the zig-zag chain compound SrTm2O4 Bhat Kademan, Abhijit; <b>Quintero Castro, Diana Lucia</b> ; Siemensmeyer, K.; Salazar-Mejia, C.; Gorbunov, D.; Stewart, J. R.; Luetkens, H.; Baines, C.; Li, Haifeng Journal of Magnetism and Magnetic Materials, 551, 169020 (2022)	0
3. Magnetization reversal driven by electron localization-delocalization crossover in the inverse spinel Co2VO4 Bhat Kademan, Abhijit; Bhandari, Churna; Paudyal, Durga; Cottrell, Stephen; Das, Pinaki; Liu, Yong; Yiu, Yuen; Kumar, C. M. Naveen; Siemensmeyer, Konrad; Hoser, Andreas; <b>Quintero Castro, Diana Lucia</b> ; Vaknin, David; Toft-Petersen, Rasmus Physical review B, 105, 094408 (2022)	0
4. Neutron diffraction of field-induced magnon condensation in the spin-dimerized antiferromagnet Sr3Cr2O8 Gazizulina, A, <b>Quintero-Castro, DL</b> , Wang, Z, Duc, F, et al. Phys. Rev. B 104, 064430 (2021)	0
5. Precise control of $J(\text{eff})=1/2$ magnetic properties in Sr2IrO4 epitaxial thin films by variation of strain and thin film thickness Geprags, S, Skovdal, BE, Scheufele, M, <b>Quintero-Castro</b> , et al Phys. Rev. B 102, 214402 (2020)	2
6. Enhanced spin correlations in the Bose-Einstein condensate compound Sr3Cr2O8 Nomura, T , Skourski, Y, <b>Quintero-Castro</b> , DL, et al. Phys. Rev. B 102, 165144 (2020)	9
7. Tuning the orbital-lattice fluctuations in the mixed spin-dimer system $\text{Ba}_{3-x}\text{Sr}_x\text{Cr}_2\text{O}_8$ A. Gazizulina, <b>D. L. Quintero-Castro</b> , D. Wulferding, J. Teyssier, K. Prokes, F. Yokaichiya and Schilling PRB 98, 144115 (2018)	0
8. The nature of spin excitations in the one-third magnetization plateau phase of Ba3CoSb2O9 Y. Kamiya, L. Ge, Tao Hong, Y. Qiu, <b>D. L. Quintero-Castro</b> , H. B. Cao, M. Matsuda, C. D. Batista, M. Mourigal, H. D. Zhou, J. Ma Nature Communications 9, 2666 (2018)	50
9. Spinon confinement in a quasi one dimensional anisotropic Heisenberg magnet A. K. Bera, B. Lake, F. H. L. Essler, L. Vanderstraeten, C. Hubig, U. Schollwöck, A. T. M. N. Islam, A. Schneidewind, and <b>D. L. Quintero-Castro</b> Phys. Rev. B 96, 054423 (2017)	52
10. MultiFLEXX - The new multi-analyzer at the cold triple-axis spectrometer FLEXX	11

Felix Groitl, Rasmus Toft-Petersen, <b>Diana Lucia Quintero-Castro</b> , Siqin Meng, Zhilun Lu, Zita Huesges, Manh Duc Le, Svyatoslav Alimov, Thomas Wilpert, Klaus Kiefer, Sebastian Gerischer, Alexandre Bertin & Klaus Habicht Scientific Reports <b>7</b> , 13637 (2017)	
11. Single-crystal growth and study of the mixed spin-dimer system $\text{Ba}_{3-x}\text{Sr}_x\text{Cr}_2\text{O}_8$ Alsu Gazizulina, <b>Diana L. Quintero-Castro</b> , and Andreas Schilling Phys. Rev. B <b>96</b> , 184201 (2017)	3
12. Field-Induced Magnonic Liquid in the 3D Spin-Dimerized Antiferromagnet $\text{Sr}_3\text{Cr}_2\text{O}_8$ Zhe Wang, <b>D. L. Quintero-Castro</b> , S. Zherlitsyn, S. Yasin, Y. Skourski, A. T. M. N. Islam, B. Lake, J. Deisenhofer, A. Loidl Phys. Rev. Lett. <b>116</b> , 147201 (2016)	11
13. Evidence for a spinon Fermi surface in a triangular-lattice quantum-spin-liquid candidate Yao Shen, Yao-Dong Li, Hongliang Wo, Yuesheng Li, Shoudong Shen, Bingying Pan, Qisi Wang, H. C. Walker, P. Steffens, M. Boehm, Yiqing Hao, <b>D. L. Quintero-Castro</b> , L. W. Harriger, M. D. Frontzek, Lijie Hao, Siqin Meng, Qingming Zhang, Gang Chen, Jun Zhao Nature <b>540</b> , 559–562 (2016)	215
14. Experimental characterization of a prototype secondary spectrometer for vertically scattering multiple energy analysis at cold-neutron triple axis spectrometers Rasmus Toft-Petersen, Felix Groitl, Mathias Kure, Joshua Lim, Petr Cermak, Svyatoslav Alimov, Thomas Wilpert, Manh Duc Le, <b>Diana Quintero-Castro</b> , Christof Niedermayer, Astrid Schneidewind, Klaus Habicht NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT <b>830</b> , 338–344 (2016)	8
15. Finite-temperature scaling of spin correlations in an experimental realization of the onedimensional Ising quantum critical point M. Haelg, D. Huevonen, T. Guidi, <b>D. L. Quintero-Castro</b> , M. Boehm, L. P. Regnault, M. Hagiwara, A. Zheludev Phys. Rev. B <b>92</b> , 014412 (2015)	17
16. Neutron resonance spin-echo upgrade at the three-axis spectrometer FLEXX F. Groitl, T. Keller, <b>D. L. Quintero-Castro</b> , K. Habicht REVIEW OF SCIENTIFIC INSTRUMENTS <b>86</b> , 025110 (2015)	14
17. High-field electron spin resonance spectroscopy of singlet-triplet transitions in the spin-dimer systems $\text{Sr}_3\text{Cr}_2\text{O}_8$ and $\text{Ba}_3\text{Cr}_2\text{O}_8$ Z. Wang, D. Kamenskyi, O. Cepas, M. Schmidt, <b>D. L. Quintero-Castro</b> , A. T. M. N. Islam, B. Lake, A. A. Aczel, H. A. Dabkowska, A. B. Dabkowski, G. M. Luke, Yuan Wan, A. Loidl, M. Ozerov, J. Wosnitza, S. A. Zvyagin, J. Deisenhofer Phys. Rev. B <b>89</b> , 174406 (2014)	12
18. Lineshape of the singlet-triplet excitations in the dimer system $\text{Sr}_3\text{Cr}_2\text{O}_8$ to first order in the high-density $1/z$ expansion J. Jensen, <b>D. L. Quintero-Castro</b> , A. T. M. N. Islam, K. C. Rule, M. Mansson, B. Lake Phys. Rev. B <b>89</b> , 134407 (2014)	12
19. Gains from the upgrade of the cold neutron triple-axis spectrometer FLEXX at the BER-II reactor M. D. Le, <b>D. L. Quintero-Castro</b> , R. Toft-Petersen, F. Groitl, M. Skoulatos, K. C. Rule, K. Habicht	35

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A 729 (2013) 220–226	
20. Asymmetric Thermal Line Shape Broadening in a Gapped 3D Antiferromagnet: Evidence for Strong Correlations at Finite Temperature <b>D. L. Quintero-Castro</b> , B. Lake, A. T. M. N. Islam, E. M. Wheeler, C. Balz, M. Mansson, K. C. Rule, S. Gvasaliya, A. Zheludev Phys. Rev. Lett. <b>109</b> , 127206 (2012)	19
21. Coexistence of long- and short-range magnetic order in the frustrated magnet SrYb <sub>2</sub> O <sub>4</sub> <b>D. L. Quintero-Castro</b> , B. Lake, M. Reehuis, A. Niazi, H. Ryll, A. T. M. N. Islam, T. Fennell, S. A. J. Kimber, B. Klemke, J. Ollivier, V. Garcia Sakai, P. P. Deen, H. Mutka Phys. Rev. B <b>86</b> , 064203 (2012)	29
22. Coupled spin-lattice fluctuations in a compound with orbital degrees of freedom: The Cr based dimer system Sr <sub>3</sub> Cr <sub>2</sub> O <sub>8</sub> D. Wulferding, P. Lemmens, C. Kwang-Yong, V. Gnezdilov, Y.i G. Pashkevich, J. Deisenhofer, <b>D. L. Quintero-Castro</b> , A. T. M. N. Islam, B. Lake Phys. Rev. B <b>84</b> , 064419 (2011)	13
23. Orbital fluctuations and orbital order below the Jahn-Teller transition in Sr <sub>3</sub> Cr <sub>2</sub> O <sub>8</sub> Z. Wang, M. Schmidt, A. Guenther, S. Schaile, N. Pascher, F. Mayr, Y. Goncharov, <b>D. L. Quintero-Castro</b> , A. T. M. N. Islam, B. Lake, H-A Krug Nidda, A. Loidl, J. Deisenhofer Phys. Rev. B <b>83</b> , 201102 (2011)	20
24. Magnetic excitations of the gapped quantum spin dimer antiferromagnet Sr <sub>3</sub> Cr <sub>2</sub> O <sub>8</sub> <b>D. L. Quintero-Castro</b> , B. Lake, E. M. Wheeler, A. T. M. N. Islam, T. Guidi, K. C. Rule, Z. Izaola, M. Russina, K. Kiefer, Y. Skourski Phys. Rev. B <b>81</b> , 014415 (2010)	40
25. Optical Floating-Zone Growth of Large Single Crystal of Spin Half Dimer Sr <sub>3</sub> Cr <sub>2</sub> O <sub>8</sub> A. T. M. Nazmul Islam, <b>D. Quintero-Castro</b> , Bella Lake, K. Siemensmeyer, K. Kiefer, Y. Skourski, T. Herrmannsdorfer CRYSTAL GROWTH & DESIGN <b>10</b> , 465–468 (2010)	16
<b>PEER-REVIEWED CONFERENCE PROCEEDINGS</b>	
1. Low-energy magnetic excitations of CeCu <sub>2</sub> Ge <sub>2</sub> investigated by inelastic neutron scattering P Geselbracht, M. Faulhaber, K. Schmalzl, <b>D. Quintero-Castro</b> , O. Stockert, M. Loewenhaupt, A. Schneidewind ICM 2015, Physics Procedia <b>75</b> , 83-90 (2015)	5
2. The upgraded cold neutron triple-axis spectrometer FLEXX - enhanced capabilities by new instrumental options K. Habicht, <b>D. L. Quintero-Castro</b> , R. Toft-Petersen, M. Kure, L. Maede, F. Groitl, M. D. Le QENS/WINS 2014, EPJ Web of Conferences <b>83</b> , 03007 (2015)	6
3. Thermal, magnetic, and structural properties of soft magnetic FeCrNbCuSiB alloy ribbons A. Rosales-Rivera, V. H. Valencia, <b>D. L. Quintero</b> , P. Pineda-Gomez, M. Gomez 7th Latin American Workshop on Magnetism, Magnetic Materials and Their Applications, CHILE, <b>384</b> , 169-171 (2006)	9
4. Thermal, Magnetic, and Structural Properties of Magnetic Domains in the Soft Magnetic Fe-CrNbCuCSiB Ribbons <b>D. L. Quintero</b> , V. H. Valencia, P. Pineda-Gomez, A. Rosales-Rivera	-

*21st Colombian Physics Meeting*, Rev. Colombiana de Fisica **38**, 2006

**5. Study of the Glass Transition in Polystyrene by means of DSC and MDS**

P. Pineda-Gomez, **D. L. Quintero**, V. H. Valencia, A. Rosales-Rivera

*21st Colombian Physics Meeting*, Rev. Colombiana de Fisica **38**, 2006

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