

## JOHN A. JASZCZAK

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Professor Jaszczak's interest in minerals dates to his early childhood and grew into his desire to become a scientist. He had served the museum as adjunct curator since 1992. His work with the Museum included development and maintenance of the collection's digital database, advice with collection management, mineralogical research, outreach, and assistance with the museum's membership society, which he also chaired for several years. His current mineralogical research interests focus on graphite, unusual mineral growth forms, and the minerals of the Merelani tanzanite mines in Tanzania. He also enjoys mineral specimen macro- and micro-photography. His photographic work has been featured in numerous mineralogical publications and has received several awards. In 2016 Luca Bindi and Werner Paar named the new mineral jaszczakite in his honor. In July 2020 he was named Director and Curator of the A. E. Seaman Mineral Museum, while also continuing as a professor in the Department of Physics.

Dr. Jaszczak's research interests have included various aspects phase transitions and dynamics at crystal surfaces and properties of materials interfaces using computer simulation. Most recently he has been leading computer-simulation studies of single-electron-transport devices, in collaboration with his graduate students as well as colleagues involved in the experimental aspects of the study. Dr. Jaszczak teaches physics courses at all levels, including large introductory classes in which he enjoys doing demonstrations and engaging students in the classroom using physics-education-research-based pedagogies. Since 2003 he has been working to advance nanotechnology education at high-school and undergraduate levels. He has been a member of the university's Academy of Teaching Excellence since 2012. During his term as Associate Dean, Dr. Jaszczak worked with faculty in the College of Sciences and Arts, as well as on the University's Assessment and General Education Councils to improve student learning through the general education and degree programs, and to develop evaluation and reporting processes to support such improvements. From summer 2018 to 2020 he served as Interim Chair of the Department of Chemistry.

### Professional Experience

Michigan Technological University Houghton, Michigan	Professor	9/2006 - present
	Associate Professor	9/1997 - 8/2006
	Assistant Professor	9/1991 - 8/1997
	Department of Physics	
	Director and Curator	7/2020 - present
	Adjunct Curator	8/1992-6/2020
	Interim Curator	6/2013-9/2013
	A. E. Seaman Mineral Museum	
	Interim Chair	7/2018 – 6/2020
	Department of Chemistry	
Associate Dean for Undergraduate Education		
College of Arts and Sciences	8/2013 - 7/2016	
Associate Director for Education and Outreach, MTU Multiscale Technologies Institute	4/2006-present	
Affiliated Professor	6/2006 - present	
Materials Science and Engineering		

	Affiliated Professor Cognitive and Learning Sciences Department	2004 - 2016
United States Air Force Office of Scientific Research	Summer Faculty Research Associate	7/1/93-8/25/93
Argonne National Laboratory Argonne, Illinois (Interface Group)	Postdoctoral Appointee Materials Science Division	6/1989-8/1991

## Education

Ph.D. (Physics). The Ohio State University, 1989. Advisor: Dr. W. F. Saam.  
Dissertation: "Facets and Roughening in Crystals and Quasicrystals."  
M.S. (Physics). The Ohio State University, 1985.  
B.S. *with Highest Honors* (Physics), Case Western Reserve University, 1983.

## Honors and Awards

2019 Jackson Center for Teaching and Learning Instructional Award for Assessment  
Dean's Teaching Showcase (Michigan Tech, spring 2019).  
Parma Senior High School Distinguished Alumni Hall of Fame, 2017.  
Eponym of the new mineral "jaszczakite", IMA Commission on New Minerals, Nomenclature and  
Classification. (November 2016).  
Mineral of the Year 2016 for merelaniite, International Mineralogical Association. (June 6, 2017).  
Michigan Technological University *Academy of Teaching Excellence*. Inducted 2012.  
Michigan Council of President's *Distinguished Professor of the Year* nominee 2010.  
Michigan Technological University *2007 Faculty Distinguished Service Award*.  
Research Associate (Geology) in the Research & Collections Division, New York State Museum. July  
2002 - December 31, 2005.  
2000 Kunz Prize Competition for best paper on aspects of northeastern U.S. mineralogy: 1st Place.  
Four "First Place" trophies and two "Best in Show" awards from four regional mineral shows for an  
extensive educational exhibit on "Crystal Symmetry," displayed throughout 1987.  
1996 Kunz Prize Competition for best paper on aspects of northeastern U.S. mineralogy: 3rd Place.  
Finalist for Distinguished Teacher of the Year award at MTU, 1993-1994.  
Ohio State University Presidential Fellowship, 1988-1989.  
Case Alumni Association Scholarship, 1981, 1982.  
The Merck Index Award for Excellence in Chemistry, 1981.  
Tau Beta Pi (Engineering Honor Society), 1981.  
Valedictorian (in class of 670). Parma Senior High School, 1979.

## Professional Memberships

Mineralogical Society of America., Society of Mineral Museum Professionals

**Publications** (\* Graduate student advisee. † Undergraduate student advisee.)

"Faceting in bond-oriented glasses and quasicrystals." T. L. Ho, J. A. Jaszczak, Y. H. Li and W. F. Saam, *Physical Review Letters* **59**, 1116-1119 (1987).

"Roughening and facet formation in the presence of subharmonic potentials." J. A. Jaszczak and W. F. Saam, *Physical Review B* **37**, 7619-7624 (1988).

"Early illustration of cinnabar crystals." J. A. Jaszczak. *Matrix: A Journal of the History of Minerals* **1**, 74- (1988).

"Ideal quasicrystal facets: A Monte Carlo study," J. A. Jaszczak, W. F. Saam and B. Yang, *Physical Review B* **39**, 9289-9295 (1989).

"Faceting in bond oriented systems with icosahedral and decagonal symmetry." T. L. Ho, Y. H. Li, W. F. Saam and J. A. Jaszczak. *Physical Review B* **39**, 10614-10626 (1989).

"Numerical study of interfacial properties of two-dimensional aperiodic systems." B. Yang, W. F. Saam and J. A. Jaszczak. *Physical Review B* **40**, 7167-7178 (1989).

"Quasicrystals." J. A. Jaszczak. In the Program of the 16th Rochester Mineralogical Symposium, Rochester, New York, April, 1989.

"Growth and dynamical roughening of ideal quasicrystal facets." J. A. Jaszczak, W. F. Saam and B. Yang, *Physical Review B* **41**, 6864-6869 (1990).

"Role of coherency in the elastic behavior of composition-modulated superlattices." J. A. Jaszczak, S. R. Phillpot and D. Wolf, *Journal of Applied Physics* **68**, 4573-4580, (1990).

"On the elastic behavior of composition-modulated superlattices," J. A. Jaszczak and D. Wolf, *Journal of Materials Research* **6**, 1207-1218 (1991).

"Calculation of elastic constants from a replica Monte Carlo simulation." J. M. Rickman and J. A. Jaszczak. *Physical Review B* **43**, 13285 (1991).

"Temperature Dependence of the Elastic Behavior of Structurally Disordered Metallic Superlattices." J. A. Jaszczak and D. Wolf. In *Structure/Property Relationships for Metal/Metal Interfaces*, edited by A. D. Romig, Jr., D. E. Fowler, and P. D. Bristowe. MRS Symp. Proc. vol. 229 (Materials Research Society, Pittsburgh, 1991) p. 85-90.

"Graphite from Crestmore, Riverside County, California." J. A. Jaszczak. *Mineralogical Record* **22**, 427-432 (1991).

"Growth Twinning in Graphite from the Crestmore and Jensen Quarries, Riverside Co., California." J. A. Jaszczak. In the Program of the 18th Rochester Mineralogical Symposium, Rochester, New York, April, 1991, and *Rocks and Minerals* **67**, 114 (1992).

"Pyrite Bars Resulting from Epitaxial Overgrowth on Marcasite Whiskers." R. P. Richards, E. L. Clopton, and J. A. Jaszczak. In the Program of the 18th Rochester Mineralogical Symposium, Rochester, New York, April, 1991, and *Rocks and Minerals* **67**, 118 (1992).

- "Computer simulation of the anomalous elastic behavior of interface materials." D. Wolf and J. A. Jaszczak. In *Materials Interfaces: Atomic-Level Structure and Properties*, edited by D. Wolf and S. Yip. (Chapman and Hall, London, 1992) pp. 365-406.
- "Role of interface dislocations and surface steps in the work of adhesion." D. Wolf and J. A. Jaszczak. In *Materials Interfaces: Atomic-Level Structure and Properties*, edited by D. Wolf and S. Yip. (Chapman and Hall, London, 1992) pp. 662-690.
- "Thermoelastic behavior of structurally disordered interface materials: Homogeneous vs. inhomogeneous effects." J. A. Jaszczak and D. Wolf, *Physical Review B* **46**, 2473-2480 (1992).
- "On the Relation Between Sliding and Migration for High-Angle Grain Boundaries." D. Wolf, S. R. Phillpot, J. A. Jaszczak, and S. Yip, *Materials Science Forum* **94-96** pt. 2, 487-494 (1992).
- "On the interaction between steps in vicinal fcc surfaces: 1. Steps along  $\langle 001 \rangle$ ." D. Wolf and J. A. Jaszczak. *Surface Science* **277**, 301-322 (1992).
- "Quasicrystals: Novel forms of solid matter." J. A. Jaszczak. *Mineralogical Record* **25** (1994) 85-93.
- "On the natural occurrence of spherical graphite." J. A. Jaszczak. In the Program of the 20th Rochester Mineralogical Symposium, Rochester, New York, April, 1993; and *Rocks and Minerals* **69**, 117-118 (1994).
- "Pyrite and Marcasite from Northern Illinois." R. P. Richards, E. L. Clopton, and J. A. Jaszczak. *Mineralogical Record* **26**, 129-138 (1995).
- "Tailored Elastic Behavior of Multilayers Through Controlled Interface Structure." D. Wolf and J. A. Jaszczak. *Journal of Computer-Aided Materials Design* **1**, 111-148 (1993).
- "Famous graphite crystals from Sterling Hill, New Jersey." J. A. Jaszczak. *The Picking Table* **35**(2), 6-11 (1994).
- "Graphite: Flat, Fibrous and Spherical." J. A. Jaszczak. In *Mesomolecules: From Molecules to Materials*, edited by G. D. Mendenhall, J. Liebman and A. Greenberg (Chapman & Hall, New York, 1995). pp. 161-180.
- "Monte Carlo Simulation of Dislocation-Nucleated Etching of Silicon {111 Surfaces." D. L. Woodraska\*, J. A. LaCrosse†, and J. A. Jaszczak In *Modeling and Simulation of Thin-Film Processing*, edited by D. J. Srolovitz, C.A. Volkert, M. J. Fluss, and R. J. Kee. MRS Symp. Proc. **389** (Materials Research Society, Pittsburgh, 1995) p. 209-214.
- "Zincite Comes to Light." J. A. Jaszczak and S. J. Dyl II. *The Picking Table* **36**(2), 18-21 (1995); and *Matrix: A Journal of the History of Minerals* **4**, 55-58 (1995).
- "Crystallography." J. A. Jaszczak. In *Introduction to 3-D Spatial Visualization*, by B. G. Baartmans and S. A. Sorby. (Prentice Hall, Englewood Cliffs, NJ, 1995) pp. 139-146; *Instructor's Resource Manual: Introduction to 3-D Spatial Visualization* by B. G. Baartmans and S. A. Sorby. (Prentice Hall, Englewood Cliffs, NJ, 1995) pp. 124-127.
- "Morphology of graphite from Pargas (Parainen), Finland." J. A. Jaszczak. In the program of the 23<sup>rd</sup> Rochester Mineralogical Symposium, Rochester, New York, April 18-21, 1996; *Rocks and Minerals* **72**, 125-126 (1997); and "More unusual graphite." [letter to the editor] *Rocks and Minerals* **72**, 297 (1997).

- “A Monte Carlo Simulation Method for {111} Surfaces of Silicon and Other Diamond-Cubic Materials.” D. L. Woodraska\* and J. A. Jaszczak. *Surface Science* **374**, 319-332 (1997).
- “Roughening and Preroughening of Diamond-Cubic {111} Surfaces.” D. L. Woodraska\* and J. A. Jaszczak. *Physical Review Letters* **78**, 258-261 (1997).
- “Unusual graphite crystals from Lime Crest Quarry, Sparta, New Jersey.” J. A. Jaszczak. In: George F. Kunz Competition Papers 1996 (New York, New York Mineralogical Club, 1996) pp. 50-57 [3rd place]; and *Rocks and Minerals* **72**, 330-334 (1997); *Rocks and Minerals* edition reprinted in *The Picking Table: Journal of the Franklin-Ogdensburg Mineralogical Society, Inc.* **39**(1), 20-24 (1998).
- “Roughening and Preroughening of Diamond-Cubic {111} Surfaces.” D. L. Woodraska\* and J. A. Jaszczak. *MRS Symposium Proceedings* **440**, 71-76 (1997).
- "The Many Faces of Copper Crystals in the Lake Superior Copper District", J. A. Jaszczak. In: "*Red Gold & Tarnished Silver*": *Mines and Minerals of the Lake Superior Copper District* (Copper Country Rock & Mineral Club, Houghton, MI, 1998) pp. 21-23, 25-30. Updated and revised: "*Red Gold & Tarnished Silver*": *Mines and Minerals of the Lake Superior Copper District* (Copper Country Rock & Mineral Club, Houghton, MI, 2001) pp. 25-33.
- “Disclinations in unusual graphite crystals from anorthosites of Ukraine.” V. N. Kvasnitsa, V. G. Yatsenko and J. A. Jaszczak. *Canadian Mineralogist* **37**(4), 951-960 (1999).
- "A new find of spherical graphite from Sterling Hill, New Jersey." G. A. Hanna and J. A. Jaszczak. *The Picking Table* **40**, 27-30 (1999).
- “Multiple length scale growth spirals on natural graphite (001) surfaces” K. McCall, J. Rakovan, and J. A. Jaszczak. Geological Society of America, 1999 annual meeting. *Abstracts with Programs* – **31**(7), 169 (1999).
- "Spherical and triskelion graphite from Gooderham, Ontario, Canada." J. A. Jaszczak and G. W. Robinson. Proceedings of the technical session of the 23rd Rochester Mineralogical Symposium, Rochester, New York, April 16, 1999. pp. 11-12; and: *Rocks & Minerals* **75** (2000) 172-173.
- "Palache's 'Contributions to the mineralogy of Sterling Hill, New Jersey': The 900-foot level revisited." J. A. Jaszczak. *Matrix: A Journal of the History of Minerals* **8**(3), 137-149 (2000). (*1st place Kunz Prize*)
- "Palache's 'Contributions to the mineralogy of Sterling Hill, New Jersey: The 900-foot level revisited." J. A. Jaszczak. *The Picking Table* **42**(1), 6-15 (2001). (Slightly different printing than in *Matrix*).
- Review of: *Typomorphism of Diamond Microcrystals* by Victor N. Kvasnitsa, Nikolai N. Zintchouk, and Vasilii I. Koptil'. NEDRA, Moscow. 1999. J. A. Jaszczak. Review published in: *Rocks and Minerals* **76**, 422-423 (2001).
- "Growth spirals on graphite from the Trotter Mine dump, Franklin, New Jersey." J. A. Jaszczak and J. Rakovan. *The Picking Table* **43**(2), 11-13 (2002).
- "Multiple length scale growth spirals on metamorphic graphite {001} surfaces studied by atomic force microscopy." J. Rakovan and J. A. Jaszczak. *American Mineralogist* **87**, 17-24 (2002).
- "Graphite with growth spirals from Arises River Marbles, Wlotzkas Baken, western Namibia." J. Rakovan and J. A. Jaszczak. *Mineralogical Record* **33**, 79 (2002).

"New occurrences of manganotantalite from Alto do Giz area, Equador, Rio Grande do Norte, Brazil." G. W. Robinson, J. A. Jaszczak, R. R. Wegner, and O. P. Mills. *Mineralogical Record* **33**, 505-510, 521 (2002).

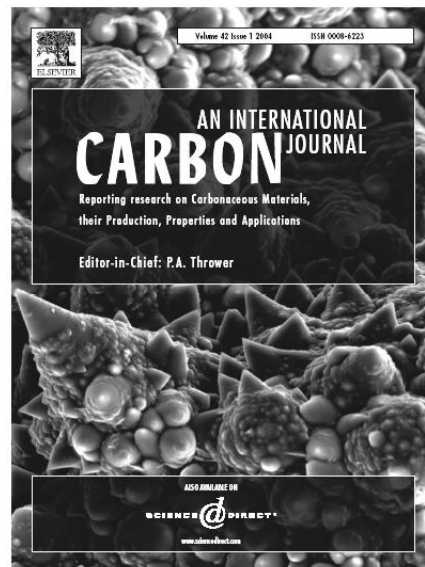
"A natural occurrence of graphite cones." J. A. Jaszczak and G. W. Robinson. Proceedings of the technical session of the 29<sup>th</sup> Rochester Mineralogical Symposium, Rochester, New York. April 19, 2002. pp. 9-10.

"Naturally occurring graphite cones." J. A. Jaszczak, G. W. Robinson, S. Dimovski and Y. Gogotsi. *Carbon* **41**, 2085-2092 (2003). Cover photo appeared on all issues of *Carbon* published in 2004 and 2005.

"Monte Carlo simulations of surface phase transitions in a modulated layered structure." D. Gao\* and J. A. Jaszczak. *Physical Review B* **67**, 155420 1-7 (2003).

"Naturally occurring cones and tubes of graphite." S. Dimovski, J. A. Jaszczak, G. W. Robinson, Y. Gogotsi, and S. A. Hackney. CARBON2004 proceedings, July 11-16, 2004. Providence, Rhode Island. (OmniPress CD).

"Mechanism for Spatial Organization in Quantum Dot Self-Assembly." D. Gao\*, A. S. Kaczynski†, and J. A. Jaszczak. *Applied Physics Letters* **86**, 133102 1-3 (2005). Also published in *Virtual Journal of Nanoscale Science & Technology* (<http://www.vjnano.org>) **11**(13), April 4, 2005.



"Kinetic Monte Carlo Simulation of Defect-Mediated Organization in Quantum Dot Self-Assembly." D. Gao\*, A. Kaczynski†, and J. A. Jaszczak. Technical Proceedings of the 2005 Nanotechnology Conference and Trade Show, Nanotech, 2005. Anaheim, CA. May 8-12, 2005.

"Landau level splitting in graphene at high magnetic fields." Y. Zhang, Z. Jiang, J. P. Small, M. S. Purewal, Y. -W. Tan, M. Fazlollahi, J. D. Chudow, J. A. Jaszczak, H. L. Stormer, and P. Kim. *Physical Review Letters* **96**, 136806 (2006).

"Micro- and nano-scale graphite cones and tubes from Hackman Valley, Kola Peninsula, Russia." J. A. Jaszczak, S. Dimovski, S. A. Hackney, G. W. Robinson, P. Bosio, and Y. Gogotsi. *Canadian Mineralogist* **45**, 379-389 (2007).

"Planting Seeds: Introducing Nanotechnology Education into Engineering Curricula." J. A. Jaszczak and B. E. Seely. *Education in Nanoscience and Engineering*, edited by R. Carpenter, S. Seal, N. Healy, N. Shinn, W. Braue (Mater. Res. Soc. Symp. Proc. **931E**, Warrendale, PA, 2006), KK01-08.

"Nano- and micro-scale graphite cones and tubes from Hackman Valley, Khibiny Massif, Kola Peninsula, Russia." J. A. Jaszczak, S. A. Hackney, and S. Dimovski. Proceedings of the technical session of the 32<sup>nd</sup> Rochester Mineralogical Symposium, Rochester, New York, April 15, 2005. *Rocks and Minerals* **82**, 238-240 (2007).

"Developing Nano Education at a Technological University: Science, Technology and Societal Implications of Nano." J. A. Jaszczak and B. E. Seely. In: *Nanoscale Science and Engineering Education: Issues, Trends and Future Directions*, A. E. Sweeney and S. Seal, Eds. American Scientific Publishers (2008) 591-619.

"Greenockite and associated uranium-vanadium minerals from the Huron River Uranium Prospect, Baraga County, Michigan." S. M. Carlson, G. W. Robinson, M. J. Elder, J. A. Jaszczak, and T. J. Bornhorst. *Rocks and Minerals* **82**, 298-308 (2007).

"Giant intrinsic carrier mobilities in graphene and its bilayer." S. V. Morozov, K. S. Novoselov, M. I. Katsnelson, F. Schedin, D. Elias, J. A. Jaszczak, and A. K. Geim. *Physical Review Letters* **100**, 016602 (2008).

"Graphene in extremely high magnetic fields." Z. Jiang, Y. Zhang, Tan, Y. -W., J. A. Jaszczak, H. L. Stormer, P. Kim. *International Journal of Modern Physics B* **21**, 8-9 (2008).

"Nanotech Innovations: Nanotechnology Enterprise at Michigan Technological University." J. A. Jaszczak, M. Raber, M. Bennett, N. Alaraje, P. L. Bergstrom, AIChE Annual Meeting Proceedings. November 20, 2008. Philadelphia, PA. (CD ROM).

"The graphites of New York: Scientific and aesthetic surprises." J. A. Jaszczak, S. C. Chamberlain and G. W. Robinson. *Rocks & Minerals* **84**, 502-519 (2009).

"Searching for graphite in "God's Own Country". J. A. Jaszczak. *Mineral News* **25**(12), 12, 4-6 (2009).

"Relationship between structure, morphology, and carbon isotopic composition of graphite in marbles: Implications for calcite-graphite carbon isotope thermometry." M. Satish-Kumar, J. A. Jaszczak, T. Hamamatsu, and H. Wada. *American Mineralogist* **96**, 470-485 (2011).

"Spirals, Scales, Cones, And Lamellae: The Strange World of Graphite Overgrowths from The Trotter Mine Dump, Franklin, New Jersey." J. A. Jaszczak. *The Picking Table* **53**(2), 17-23 (2012).

"Word to the Wise: Raman spectroscopy in the identification and study of minerals." J. A. Jaszczak. *Rocks & Minerals* **88**, 184-189 (2013).

"Miracle at Merelani: A remarkable occurrence of graphite, diopside and associated minerals from the Karo Pit, Block D, Merelani Hills, Arusha Region, Tanzania." J. A. Jaszczak, and D. Trinchillo. *Rocks & Minerals* **88**, 154-165 (2013).

"Fluorapatite from a remarkable occurrence of graphite and associated minerals, Karo Pit, Block D, Merelani Hills, Arusha Region, Tanzania." J. M. Long, J. Rakovan, J. A. Jaszczak, A. J. Sommer, and R. R. Anczkiewicz, *Rocks & Minerals* **88**, 179-183 (2013).

"Stellate surface features on graphite from Crestmore, California, and Amity, New York." J. A. Jaszczak. *Mineral News* **28**(11), 1-4, 10 (2012).

"Nanotech Innovations Enterprise at Michigan Technological University." J. A. Jaszczak, E. M. Bouta, and M. B. Raber. *Journal of Nano Education* **5**, 27-43 (2013).

"Room Temperature Tunneling Behaviors of Boron Nitride Nanotubes Functionalized with Gold Quantum Dots." C. H. Lee, M. A. Savaikar,\* J. S. Wang, B. Y. Hao, D. Y. Zhang, D. Banyai,\* J. A. Jaszczak, and Y. K. Yap. *Advanced Materials* **25**, 4544-4548 (2013). DOI: 10.1002/adma.201301339.

"Simulation of charge transport in multi-island tunneling devices: Application to disordered one-dimensional systems at low and high bias." M. A. Savaikar,\* D. Banyai,\* P. L. Bergstrom, and J. A. Jaszczak. *Journal of Applied Physics* **114**, 114504-1-12 (2013).

"Optically sector zoned (star) diamonds from Zimbabwe." J. Rakovan, E. Gaillou, J. E. Post, J. A. Jaszczak, J. Betts. *Rocks and Minerals* **89** 173-178 (2014).

“Plasma synthesis of hexagonal-pyramidal graphite hillocks.” X. Glad, L. de Poucques, J. A. Jaszczak, M. Belmahi, J. Ghanbaja, and J. Bougdira. *Carbon* **76**, 330-340 (2014).

“Spectacular sulfides from the Merelani tanzanite deposit, Lelatema Mountains, Manyara Region, Tanzania.” S. Harrison, J. A. Jaszczak, M. Keim, M. Rumsey, and M. Wise. *The Mineralogical Record* **45**, 553-570 (2014).

“Simulation of charge transport in disordered assemblies of metallic nano-islands: Application to boron-nitride nanotubes functionalized with gold quantum dots.” J. A. Jaszczak, M. A. Savaikar\*, D. R. Banyai\*, B. Hao, D. Zhang, P. L. Bergstrom, A.-P. Li, J.-C. Idrobo, and Y. K. Yap. MRS Symposium Proceedings Spring (2014).

“Viewpoint: Watching Quasicrystals Grow.” J. A. Jaszczak. *Physics* **8**, 78 (2015).  
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“Merelani: Tansanit und Seltene Sammlermineralien.” S. Weiß, J. A. Jaszczak, S. Harrison, J. Hintze, and W. Radl. *Lapis* **40**, 34-63, 90 (2015).

“New Flexible Channels for Room Temperature Tunneling Field Effect Transistors”. B. Hao, A. Asthana, P. K. Hazaveh\*, P. Bergstrom, D. Banyai\*, M. Savaikar\*, J. A. Jaszczak, and Y. K. Yap. *Scientific Reports* **6**, 20293 (2016).

“Physical Mechanisms Leading to the Coulomb Blockade and Coulomb Staircase Structures in Strongly Coupled Multi-Island Single-Electron Devices.” M. A. Savaikar\*, P. L. Bergstrom, J. A. Jaszczak. *ECS Journal of Solid State Science and Technology* **5**, Q199-Q103, (2016).

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“Merelaniite, Mo<sub>4</sub>Pb<sub>4</sub>V<sub>5</sub>Sb<sub>5</sub>S<sub>15</sub>, a New Molybdenum-Essential Member of the Cylindrite Group, from the Merelani Tanzanite Deposit, Lelatema Mountains, Manyara Region, Tanzania.” J. A. Jaszczak, M. S. Rumsey, L. Bindi, S. A. Hackney, M. A. Wise, C. J. Stanley, and J. Spratt. *Minerals* **6**, 115 (2016).  
doi:10.3390/min6040115

“IMA No. 2016-042.” Rumsey, M.S., Jaszczak, J.A., Bindi, L., Hackney, S.A., Wise, M.A., Stanley, C. and Spratt, J. CNMNC Newsletter No. 33, October 2016, p. 1137; *Mineralogical Magazine* **80**, 1135–1144 (2016).

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“The Where of Mineral Names: Merelaniite, Merelani (Mererani), Manyara Region, Tanzania.” J. A. Jaszczak. *Rocks and Minerals* **92**, 382-385 (2017).

“Dravite and Merelaniite.” J. Jaszczak, E. Angi-O’Brien, and J. Rakovan. *Rocks & Minerals* **92**, 505 (2017).

“Efficient Physics-based Modeling of a Representative Semiconducting Quantum Dot Single Electron Device.” P. K. Hazaveh\*, P. L. Bergstrom, and J. A. Jaszczak. (IEEE-NANO), 2017 IEEE 17th International Conference on Nanotechnology. 739-774 (2017). (DOI: 10.1109/NANO.2017.8117296)

“Who’s Who in Mineral Names: Luca Bindi (b. 1971).” J. A. Jaszczak. *Rocks & Minerals* **94**, 188-190 (2019).



“Modeling of Gate Effects on Electron Transport in a Single-Electron Transistor with Two Semiconducting Islands Between Two Semiconducting Electrodes.” P. K. Hazaveh\*, P. L. Bergstrom, and J. A. Jaszczak. 2018 13th IEEE Nanotechnology Materials and Devices Conference (NMDC) 459 – 462 (2018). (DOI 10.1109/NMDC.2018.8605843)

“Merelaniite inclusions in Tanzanite.” A. Castillo, T. Smith, and J. A. Jaszczak. *Gems & Gemology* **54**(2), 226-227 (2018).

“2.0 Tucson 2018: Just a few items of interest.” J. A. Jaszczak. *Mineralogical Almanac/Mineral Observer* **23**(2) 70-71 (2018).

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