# AC-TEM - Publications about biological materials

## *2013*


1. Baudoin, J. P., Jinschek, J. R., Boothroyd, C. B., Dunin-Borkowski, R. E., & de Jonge, N. (2013). Chromatic aberration-corrected tilt series transmission electron microscopy of nanoparticles in a whole mount macrophage cell. Microscopy and Microanalysis, 19(04), 814-820.
2. Bell, D. C. (2013). Application of Low Voltage Transmission Electron Microscopy. Microscopy and Microanalysis, 19(S2), 1208-1209.
3. Cools-Lartigue, J., Spicer, J., McDonald, B., Gowing, S., Chow, S., Giannias, B., Bourdeau, F., Kubes, P., & Ferri, L. (2013). Neutrophil extracellular traps sequester circulating tumor cells and promote metastasis. The Journal of clinical investigation, 123(8), 3446-3458.
4. Ermakova, A., Pramanik, G., Cai, J. M., Algara-Siller, G., Kaiser, U., Weil, T., Tzeng, Y.-K., Chang, H. C., McGuinness, L. P., Plenio, M. B., Naydenov, B., & Jelezko, F. (2013). Detection of a few metallo-protein molecules using color centers in nanodiamonds. Nano letters, 13(7), 3305-3309.
5. Gordon, L., Cohen, M. J., & Joester, D. (2013). Correlative Microscopy and Spectroscopy of Buried Interfaces in Tooth Enamel. Microscopy and Microanalysis, 19(S2), 1634-1635.
6. Kabalah-Amitai, L., Mayzel, B., Kauffmann, Y., Fitch, A. N., Bloch, L., Gilbert, P. U., & Pokroy, B. (2013). Biogenic Organic/Inorganic Nano-Composite: Imaging the Macro to Atomic Structure of Herdmania momus Vateritic Spicules. Microscopy and Microanalysis, 19(S2), 1626-1627.
7. Krystofiak, E. S., Mattson, E. C., Voyles, P. M., Hirschmugl, C. J., Albrecht, R. M., Gajdardziska-Josifovska, M., & Oliver, J. A. (2013). Multiple Morphologies of Gold–Magnetite Heterostructure Nanoparticles are Effectively Functionalized with Protein for Cell Targeting. Microscopy and Microanalysis, 19(04), 821-834.
8. Van Dyck, D., Lobato Hoyos, I. P., Lücken, U., & Stark, H. (2013). High-Resolution Incoherent Imaging in a Cs corrected Electron Microscope: A New Tool for High-Resolution Electron Tomography in Life Science. Microscopy and Microanalysis, 19(S2), 540-541.
9. Wang, C., Sinha-Ray, S., Yarin, A. L., Shokuhfar, T., & Klie, R. (2013). Electron Tomography of Hydrated Ferritin Particles Using Carbon Nanotube Liquid Cell. Microscopy and Microanalysis, 19(S2), 566-567.


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10. Pantelic, R. S., Meyer, J. C., Kaiser, U., & Stahlberg, H. (2012). The application of Graphene as a sample support in Transmission Electron Microscopy. Solid State Communications, 152, 1375-1382.
11. Salafranca, J., Gazquez, J., Pérez, N., Labarta, A., Pantelides, S. T., Pennycook, S. J., Batlle, X. & Varela, M. (2012). Surfactant Organic Molecules Restore Magnetism in Metal-Oxide Nanoparticle Surfaces. Nano letters, 12(5), 2499-2503.
12. Walter, A., Muzik, H., Vieker, H., Turchanin, A., Beyer, A., Gölzhäuser, A., Lacher, M., Steltenkamp, S., Schmitz, S., Holik, P., Kühlbrandt, W., & Rhinow, D. (2012). Practical aspects of Boersch phase contrast electron microscopy of biological specimens. Ultramicroscopy, 116, 62-72.

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13. Barton, B., Rhinow, D., Walter, A., Schröder, R., Benner, G., Majorovits, E., Matijevic, M., Niebel, H., Mueller, H., Haider, M., Lacher, M., Schmitz, S., Holik, P., & Kühlbrandt, W. (2011). In-focus electron microscopy of frozen-hydrated biological samples with a Boersch phase plate. Ultramicroscopy, 111(12), 1696-1705.
14. Bell, D., Thomas, W., Murtagh, K., & Glover, W. (2011). Albert Crewe's Dream Realized: Sequencing DNA with STEM. Microscopy and Microanalysis, 17(S2), 1276-1277.
15. Dukes, M. J., Ramachandra, R., Baudoin, J. P., Gray Jerome, W., & de Jonge, N. (2011). Three-dimensional locations of gold-labeled proteins in a whole mount eukaryotic cell obtained with 3nm precision using aberration-corrected scanning transmission electron microscopy. Journal of structural biology, 174(3), 552-562.
16. Gao, J., Blondeau, P., Salice, P., Menna, E., Bártová, B., Hébert, C., Leschner, J., Kaiser, U., Milko, M., Ambrosch-Draxl, C., & Loi, M. A. (2011). Electronic Interactions between “Pea” and “Pod”: The Case of Oligothiophenes Encapsulated in Carbon Nanotubes. Small, 7(13), 1807-1815.
17. Pantelic, R. S., Suk, J. W., Magnuson, C. W., Meyer, J. C., Wachsmuth, P., Kaiser, U., Ruoff, R. S., & Stahlberg, H. (2011). Graphene: Substrate preparation and introduction. Journal of Structural Biology, 174(1), 234-238.
18. Yu, X., Ge, P., Jiang, J., Atanasov, I., & Zhou, Z. H. (2011). Atomic model of CPV reveals the mechanism used by this single-shelled virus to economically carry out functions conserved in multishelled reoviruses. Structure 19(5) 652-661.

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19. Barton, B., Schultheiß, K., Matijevic, M., Gerthsen, D., & Kühlbrandt, W. (2010). Optimized In-focus Boersch Phase Contrast in a Dedicated TEM. Microscopy and Microanalysis, 16(S2), 540-541.
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21. Majorovits, E., Barton, B., Benner, G., Dietl, C., Kühlbrandt, W., Lengweiler, S., Mandler, T., Matijevic, M., Niebel, H., & Schröder, R. R. (2010). Phase contrast aberration corrected electron microscope for phase plate imaging. Microsc. Microanal, 16(Suppl 2), 534-535.
22. Nam, K. T., Shelby, S. A., Choi, P. H., Marciel, A. B., Chen, R., Tan, L., Chu, T. K., Mesch, R. A., Lee, B.-C., Connolly, M. D., Kisielowski, C., & Zuckermann, R. N. (2010). Free-floating ultrathin two-dimensional crystals from sequence-specific peptoid polymers. Nature materials, 9(5), 454-460.
23. Pantelic, R. S., Meyer, J. C., Kaiser, U., Baumeister, W., & Plitzko, J. M. (2010). Graphene oxide: a substrate for optimizing preparations of frozen-hydrated samples. Journal of structural biology, 170(1), 152-156.

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24. Dong, L. (2009). DNA-templated synthesis of Pt nanoparticles on single-walled carbon nanotubes. Nanotechnology, 20(46), 465602.
25. Gai, P. L., & Boyes, E. D. (2009). Advances in atomic resolution in situ environmental transmission electron microscopy and 1Å aberration corrected in situ electron microscopy. Microscopy Research and Technique, 72(3), 153-164.
26. Lee, Z., Jeon, K. J., Dato, A., Erni, R., Richardson, T. J., Frenklach, M., & Radmilovic, V. (2009). Direct Imaging of Soft− Hard Interfaces Enabled by Graphene. Nano Letters, 9(9), 3365-3369.
27. Pan, Y. H., Sader, K., Powell, J. J., Bleloch, A., Gass, M., Trinick, J., ... & Brown, A. (2009). 3D morphology of the human hepatic ferritin mineral core: new evidence for a subunit structure revealed by single particle analysis of HAADF-STEM images. Journal of structural biology, 166(1), 22-31.
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29. Evans, J. E., Hetherington, C., Kirkland, A., Chang, L. Y., Stahlberg, H., & Browning, N. (2008). Low-dose aberration corrected cryo-electron microscopy of organic specimens. Ultramicroscopy, 108(12), 1636-1644.
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31. Liu, Z., Yanagi, K., Suenaga, K., Kataura, H., & Iijima, S. (2007). Imaging the dynamic behaviour of individual retinal chromophores confined inside carbon nanotubes. Nature Nanotechnology, 2(7), 422-425.
32. Porter, A. E., Gass, M., Muller, K., Skepper, J. N., Midgley, P. A., & Welland, M. (2007). Direct imaging of single-walled carbon nanotubes in cells. Nature Nanotechnology, 2(11), 713-717.