

## Selected Publications on Dutch and Flemish Art (as of 20 October 2023)

1. G. Van der Snickt, K. Janssens, J. Dik, W. De Nolf, F. Vanmeert, J. Jaroszewicz, M. Cotte, G. Falkenberg, L. Van der Loeff, *Combined use of Synchrotron Radiation Based Micro-X-ray Fluorescence, Micro-X-ray Diffraction, Micro-X-ray Absorption Near-Edge, and Micro-Fourier Transform Infrared Spectroscopies for Revealing an Alternative Degradation Pathway of the Pigment Cadmium Yellow in a Painting by Van Gogh*, *Analytical Chemistry*, **84** (2012) no. 23, 10221-10228. DOI: [10.1021/ac3015627](https://doi.org/10.1021/ac3015627)
2. A. Anitha, A. Brasoveanu, M. Duarte, S. Hughes, I. Daubechies, J. Dik, K. Janssens, M. Alfeld, *Restoration of X-ray fluorescence images of hidden paintings*, *Signal Processing*, **93** (2013), 592-604. DOI: [10.1016/j.sigpro.2012.09.027](https://doi.org/10.1016/j.sigpro.2012.09.027)
3. L. Monico, K. Janssens, C. Miliani, G. Van der Snickt, G.; B.G. Brunetti, M. Cestelli Guidi, M. Radepont, M. Cotte, *The degradation process of lead chromate in paintings by Vincent van Gogh studied by means of spectromicroscopic methods. 3. Synthesis, characterization and detection of different crystal forms of the chrome yellow pigment*, *Analytical Chemistry*, **85** (2013) no. 2, 851-859. DOI: [10.1021/ac302158b](https://doi.org/10.1021/ac302158b)
4. L. Monico, K. Janssens, C. Miliani, G. Van der Snickt, B. Brunetti, M. Cestelli Guidi, M. Radepont, M. Cotte, *The degradation process of lead chromate in paintings by Vincent van Gogh studied by means of spectromicroscopic methods. 4. Artificial ageing of model samples of co-precipitates of lead chromate and lead sulfate*, *Analytical Chemistry*, **85** (2013), no. 2, 860-867. DOI: [10.1021/ac3021592](https://doi.org/10.1021/ac3021592)
5. M. Alfeld, W. De Nolf, S. Cagno, K. Appel, D.P. Siddons, A. Kuczewski, K. Janssens, J. Dik, K. Trentelman, M. Walton and A. Sartorius, *Revealing hidden paint layers in oil paintings by means of scanning macro-XRF: a mock-up study based on Rembrandt's "An old man in military costume"*, *Journal of Analytical Atomic Spectrometry*, **28** (2013), no. 1, 40-51. DOI: [10.1039/c2ja30119a](https://doi.org/10.1039/c2ja30119a)
6. K. Janssens, M. Alfeld, G. Van der Snickt, W. De Nolf, F. Vanmeert, M. Radepont, L. Monico, J. Dik, M. Cotte, G. Falkenberg, C. Miliani, B. Brunetti, *The Use of Synchrotron Radiation for the Characterization of Artists' Pigments and Paintings*, *Annual Reviews of Analytical Chemistry*, **6** (2013), 399-425. DOI: [10.1146/annurev-anchem-062012-092702](https://doi.org/10.1146/annurev-anchem-062012-092702)
7. M. Alfeld, J.V. Pedroso, M. van Eikema Hommes, G. Van der Snickt, G. Tauber, J. Blaas, M. Haschke, K. Erler, J. Dik, K. Janssens, *A mobile instrument for in situ scanning macro-XRF investigation of historical paintings*, *Journal of Analytical Atomic Spectrometry*, **28** (2013), 760-767. DOI: [10.1039/c3ja30341a](https://doi.org/10.1039/c3ja30341a)
8. M. Alfeld, G. Van der Snickt, F. Vanmeert, K. Janssens, J. Dik, K. Appel, L. van der Loeff, M. Chavannes, T. Meedendorp, E. Hendriks, *Scanning XRF investigation of a Flower Still Life and its underlying composition from the collection of the Kröller-Müller*, *Applied Physics*, A 111 (2013) 165-170. DOI: [10.1007/s00339-012-7526-x](https://doi.org/10.1007/s00339-012-7526-x)
9. F. Da Pieve, C. Hogan, D. Lamoen, J. Verbeeck, F. Vanmeert, M. Radepont, M. Cotte, K. Janssens, X. Gonze, G. Van Tendeloo, *Casting Light on the Darkening of Colors in*

*Historical Paintings*, Physical Review Letters, **111** (2013) 208302. DOI: [10.1103/PhysRevLett.111.208302](https://doi.org/10.1103/PhysRevLett.111.208302)

10. H.Y. Tan, H. Tian, J. Verbeeck, L. Monico, K. Janssens, G. Van Tendeloo, *Nanoscale Investigation of the Degradation Mechanism of a Historical Chrome Yellow Paint by Quantitative Electron Energy Loss spectroscopy Mapping of Chromium Species*, *Angewandte Chemie – International Edition*, **52** (2013) 11360-11363. DOI: [10.1002/anie.201305753](https://doi.org/10.1002/anie.201305753)
11. W. Anaf, K. Janssens, K. De Wael, *Formation of metallic mercury during photodegradation/photodarkening of  $\alpha$ -HgS: electrochemical evidence*, *Angewandte Chemie – International Edition*, **52** (2013) 12568–12571. DOI: [10.1002/anie.201303977](https://doi.org/10.1002/anie.201303977)
12. S. Legrand, M.W. Alfeld, F. Vanmeert, W. De Nolf, K. Janssens, *Macroscopic Fourier Transformed Infrared scanning in reflection mode (MA-rFTIR), chemical imaging of cultural heritage artefacts in the mid-infrared range*, *Analyst*, **139** (2014) 2489-2498. DOI: [10.1039/c3an02094k](https://doi.org/10.1039/c3an02094k)
13. L. Monico, K.H. Janssens, F. Vanmeert, M. Cotte, B.G. Brunetti, G. Van der Snickt, M. Leeuwestein, J. Salvant Plisson, M. Menu, C. Miliani, *Degradation process of lead chromate in paintings by Vincent van Gogh studied by means of spectromicroscopic methods. 5. Artificial ageing of model samples of co-precipitates of lead chromate and lead sulfate*, *Analytical Chemistry*, **86** (2014) 10804-10811. DOI: [10.1021/ac502841g](https://doi.org/10.1021/ac502841g)
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15. S. Legrand, F. Vanmeert, G. Vandersnickt, M. Alfeld, W. De Nolf, J. Dik and K. Janssens, *Examination of historical paintings by state-of-the-art hyperspectral imaging methods: from Scanning Infra-red Spectroscopy to Computed X-ray laminography*, *Heritage Science*, **2** (2014) 13. DOI: [10.1186/2050-7445-2-13](https://doi.org/10.1186/2050-7445-2-13)
16. F. Vanmeert, G. Van der Snickt, K. Janssens, *Plumbonacrite Identified by X-ray Powder Diffraction Tomography as a Missing Link during Degradation of Red Lead in a Van Gogh Painting*, *Angewandte Chemie – International Edition*, **54** (2015) 3607-3610. DOI: [10.1002/anie.201411691](https://doi.org/10.1002/anie.201411691)
17. M. Radepon, Y. Coquinot, K. Janssens, J.-J. Ezrati, W. de Nolf and M. Cotte, *Thermodynamic and experimental study of the degradation of the red pigment mercury sulfide*, *Journal of Analytical Atomic Spectrometry*, **30** (2015) 599-612. DOI: [10.1039/c4ja00372a](https://doi.org/10.1039/c4ja00372a)
18. L. Monico, K. Janssens, M. Alfeld, M. Cotte, F. Vanmeert, C.G. Ryan, G. Falkenberg, D.L. Howard, B.G. Brunetti and C. Miliani, *Full spectral XANES imaging using the Maia detector array as a new tool for the study of the alteration process of chrome yellow pigments in paintings by Vincent van Gogh*, *Journal of Analytical Atomic Spectrometry*, **30** (2015) 613-626. DOI: [10.1039/c4ja00419a](https://doi.org/10.1039/c4ja00419a)

19. M. Alfeld, C. Laurenze-Landsberg, A. Denker, K. Janssens, P. Noble, *Neutron activation autoradiography and scanning macro-XRF of Rembrandt van Rijn's Susanna and the Elders (Gemaldegalerie Berlin): a comparison of two methods for imaging of historical paintings with elemental contrast*, *Appl. Physics A – Materials Science & Processing*, **119** (2015) 795-805. DOI: [10.1007/s00339-015-9081-8](https://doi.org/10.1007/s00339-015-9081-8)
20. K. Trentelman, K. Janssens, G. Van der Snickt, Y. Szafran, A.T. Woollet, J. Dik, *Rembrandt's An Old Man in Military Costume: the underlying image re-examined*, *Appl. Physics A – Materials Science & Processing*, **121** (2015) 801-811. DOI: [10.1007/s00339-015-9426-3](https://doi.org/10.1007/s00339-015-9426-3)
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23. G. Van der Snickt, A. Martins, J. Delaney, K. Janssens, J. Zeibel, M. Duffy, C. McGlinchey, B. Van Briel, J. Dik, *Exploring a Hidden Painting Below the Surface of Rene Magritte's Le Portrait*, *Applied Spectroscopy*, **70** (2016) 57-67. DOI: [10.1177/0003702815617123](https://doi.org/10.1177/0003702815617123)
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