

## David L. Windt Publications

### Peer-Reviewed Journals

1. L. A. Rachmeler, A. R. Winebarger, S. L. Savage, L. Golub, K. Kobayashi, G. D. Vigil, D. H. Brooks, J. W. Cirtain, B. De Pontieu, D. E. McKenzie, R. J. Morton, H. Peter, P. Testa, S. K. Tiwari, R. W. Walsh, H. P. Warren, C. Alexander, D. Ansell, B. L. Beabout, D. L. Beabout, C. W. Bethge, P. R. Champey, P. N. Cheimets, M. A. Cooper, H. K. Creel, R. Gates, C. Gomez, A. Guillory, H. Haight, W. D. Hogue, T. Holloway, D. W. Hyde, R. Kenyon, J. N. Marshall, J. E. McCracken, K. McCracken, K. O. Mitchell, M. Ordway, T. Owen, J. Ranganathan, B. A. Robertson, M. J. Payne, W. Podgorski, J. Pryor, J. Samra, M. D. Sloan, H. A. Soohoo, D. B. Steele, F. V. Thompson, G. S. Thornton, B. Watkinson & D. Windt, 'The High-Resolution Coronal Imager, Flight 2.1', *Solar Physics*, 294, 174 (2019) doi: 10.1007/s11207-019-1551-2
2. D. L. Windt, 'Monochromatic mammography using scanning X-ray mirrors', *Rev. Sci. Instrum.*, 89, 083702 (2018) doi:10.1063/1.5041799
3. H. L. Marshall, H. Moritz Günther, R. K. Heilmann, N. S. Schulz, M. Egan, T. Hellickson, D. L. Windt, E. M. Gullikson, B. Ramsey, G. Tagliaferri, and G. Pareschi, 'Design of a broad-band soft X-ray polarimeter', *J. Astron. Telesc. Instrum. Syst.*, 4, 011005-1 – 011005-12 (2018), doi: 10.1117/1.JATIS.4.1.011005
4. J. Goldstein, C. R. Chappell, M.W. Davis, M. H. Denton, R. E. Denton, D. L. Gallagher, G. R. Gladstone, M. B. Lecoche, B. R. Sandel, and D. L. Windt, 'Imaging the global distribution of plasmaspheric oxygen', *J. Geophys. Res. – Space Physics*, 123, 2078 – 2103 (2018), doi: 10.1002/2017JA024531
5. D. L. Windt and E. M. Gullikson, 'Pd/B<sub>4</sub>C/Y multilayer coatings for extreme ultraviolet applications near 10 nm wavelength', *App. Op.*, 54, 5850 – 5860 (2015); doi: 10.1364/AO.54.005850
6. D. L. Windt, 'Laboratory-based X-ray reflectometer for multilayer characterization in the 15-150 keV energy band', *Rev. Sci. Instrum.*, 86, 043107 (2015); doi: 10.1063/1.4916737
7. K. Kobayashi, J. Cirtain, A. R. Winebarger, K. Korreck, L. Golub, R. W. Walsh, B. De Pontieu, C. DeForest, A. Title, S. Kuzin, S. Savage, D. Beabout, B. Beabout, W. Podgorski, D. Caldwell, K. McCracken, M. Ordway, H. Begner, R. Gates, S. McKillop, P. Cheimets, S. Platt, N. Mitchell, D. Windt, 'Hi-C: The High Resolution Coronal Imager', *Solar Physics* (2014) doi: 10.1007/s11207-014-0544-4
8. D. Martínez-Galarce, R. Soufli, D. L. Windt, M. Bruner, E. Gullikson, S. Khatri, E. Spiller, J. C. Robinson, S. Baker, E. Prast, 'Multisegmented, multilayer-coated mirrors for the Solar Ultraviolet Imager', *Opt. Eng.* 52, 095102 (2013)
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10. P. Boerner, C. Edwards, J. Lemen, A. Rausch, C. Schrijver, R. Shine, L. Shing, R. Stern, T. Tarbell, A. Title, C. J. Wolfson, R. Soufli, E. Spiller, E. Gullikson, D. McKenzie, D. Windt, L. Golub, W. Podgorski, P. Testa, M. Weber, 'Initial Calibration of the Atmospheric Imaging Assembly (AIA) on the Solar Dynamics Observatory (SDO)', *Solar Phys.*, 275, 41 – 66 (2012)
11. A. J. Corso, P. Zuppella, D. L. Windt, M. Zangrando, M. G. Pelizzo, 'Extreme ultraviolet multilayer for the FERMI@Elettra free electron laser beam transport system', *Opt. Ex.*, 20, 8006 – 8014 (2012)

12. M. G. Pelizzo, A. J. Corso, P. Zuppella, P. Nicolosi, S. Fineschi, J. Seely, B. Kjørnattawanich, D. L. Windt, 'Long-term stability of Mg/SiC multilayers', *Opt. Eng.* 51, 023801 (2012)
13. M. G. Pelizzo, A. J. Corso, P. Zuppella, D. L. Windt, G. Mattei and P. Nicolosi, 'Stability of EUV multilayer coatings to low energy proton bombardment', *Opt. Ex.* 19, 14838 – 14844 (2011)
14. A. J. Corso, P. Zuppella, P. Nicolosi, D. L. Windt, E. Gullikson, and M. G. Pelizzo, 'Capped Mo/Si multilayers with improved performance at 30.4 nm for future solar missions', *Opt. Ex.*, 19, 13963 – 13973 (2011)
15. P. Zuppella, G. Monaco, A. J. Corso, P. Nicolosi, D. L. Windt, V. Bello, G. Mattei, M. G. Pelizzo, 'Iridium/silicon multilayers for EUV applications in the 20-35 nm wavelength range', *Opt. Lett.*, 36, 1203 – 1205 (2011)
16. B. Kjørnattawanich, D. L. Windt, and J. F. Seely, 'Optical constants determination of samarium, holmium and erbium in the 1.5-850 eV spectral range using a transmittance method', *App. Opt.*, 49, 6006 – 6013 (2010)
17. M. G. Pelizzo, M. Suman, D. L. Windt, P. Zuppella and P. Nicolosi, 'EUV multilayer coated mirrors for attophysics, photolithography and space experiments: Software design procedure', *Nucl. Inst. & Meth. A*, 623, 782 – 785 (2010)
18. D. L. Windt and J. A. Bellotti, 'Performance, structure and stability of SiC/Al multilayer films for extreme ultraviolet applications', *App. Op.*, 48, 4932 – 4941 (2009)
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23. M. Suman, M.-G. Pelizzo, P. Nicolosi, D. L. Windt, 'Aperiodic multilayers with enhanced reflectivity for extreme ultraviolet lithography', *App. Op.*, 47, 2906-2914 (2008)
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25. J. L. Culhane, L. K. Harra, A. M. James, J. Al-Janabi, L. J. Bradley, R. A. Chaudry, K. Rees, J. A. Tandy, P. Thomas, M. C. R. Whillock, B. Winter, G. Doschek, C. M. Korendyke, C. M., Brown, S. Myers, J. Mariska, J. Seely, J. Lang, B. J. Kent, B. M., Shaughnessy, P. R. Young, G. M. Simnett, C. M., Castelli, S. Mahmoud, H. Mapson-Menard, B. J. Probyn, R. J. Thomas, J. Davila, K. Dere, D. Windt, J. Shea, R. Hagood, R. Moye, H. Hara, T. Watanabe, K. Matsuzaki, T. Kosugi, V. Hansteen, Ø. Wikstol, 'The EUV Imaging Spectrometer for Hinode', *Solar Physics*, 243, 19 – 61 (2007)
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27. B. Kjørnattawanich, D. L. Windt, J. F. Seely and Yu. A. Uspenskii, 'SiC/Tb and Si/Tb multilayer coatings for EUV solar imaging', *App. Opt.*, 45, 1765 – 1772 (2006)
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29. D. L. Windt, S. Donguy, J. F. Seely, B. Kjørnattawanich, 'Experimental comparison of extreme-ultraviolet multilayers for solar physics', *App. Opt.*, 43, 1835 – 1848 (2004)

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37. F. E. Christensen, W. W. Craig, M. Jimenez-Garate, C. J. Hailey, F. A. Harrison, P. H. Mao, D. L. Windt, E. Ziegler, V. Honkimaki, M. S. Del Rio, A. Souvorov, and A. Freund, 'Measured reflectance of graded multilayer mirrors designed for astronomical hard X-ray telescopes', *Nucl. Instr. Meth. A*, 451, 572-581 (2000)
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40. D. L. Windt, S. M. Kahn, and W. C. Cash, 'The scattering of X-rays by interstellar dust on the micro-arcsecond scale', *Ap. J*, 528, 306 – 309 (2000)
41. D. L. Windt, 'Periodic and depth-graded Cu/Si multilayers for hard X-ray optics', *Appl. Phys. Let.*, 74, 2890 – 2892 (1999)
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### Book Chapters

1. D. L. Windt (2019), 'Multilayer Coatings', In 'The WSPC Handbook of Astronomical Instrumentation', Vol. 4, pp. ?? – ?? 'X-ray Astronomical Instrumentation', Ed. David N. Burrows, World Scientific Publishing, ISBN: 978-981-4644-31-0, doi: 10.1142/9446

### Other Publications

1. H. L. Marshall, A. Garner, S. N. Heine, N. S. Schulz, R. K. Heilmann, B. Ramsey and D. L. Windt, 'Soft X-ray polarimetry with the REDSoX Polarimeter and beyond', *Proc. SPIE*, 11118 (2019); doi: 10.1117/12.2529546
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