

# Scientific Publications

## by Friedrich Aumayr

### Overview

A.	Journal articles in international peer-reviewed ISI-listed journals	326
B.	Books, edited books, book chapters, and invited contributions to conferences	55
C.	Contributions in conference proceedings and other publications	284
	<b>Total number of publications</b>	<b>665</b>

Publications are listed in reversed chronological order below. Publications in **high impact factor journals** (i.e. journal impact factor > 5) are highlighted in red.

For up-to-date ISI statistics, including citations and Hirsch-index, visit Web of Science online at <https://www.webofscience.com/wos/author/record/33268036>. For a full record, visit Scholar Google <https://scholar.google.com/citations?user=y1IXIKIAAAJ>.

### A. Journal articles (peer-reviewed)

#### 2024

- A326 N. Jäggi, J. Brötzner, P. S. Szabo, H. Biber, A. Mutzke, J. Gasser, **F. Aumayr**, P. Wurz, and A. Galli  
*SpuBase: Solar Wind Ion Sputter Database for Modeling Purposes*  
 The Planetary Science Journal \* (2024) \*\* (\*\* pages) in print  
[https://doi.org/10.3847/PSJ/\\*\\*\\*\\*](https://doi.org/10.3847/PSJ/****)
- A325 A. Niggas, M. Werl, **F. Aumayr**, and R. A. Wilhelm  
*Charge exchange of slow highly charged ions from an electron beam ion trap with surfaces and 2D materials*  
 Journal of Physics B: At. Mol. Opt. Phys. \*\* (2024) \*\* (\*\* pages)  
<http://dx.doi.org/10.1088/1361-6455/ad2e2a>

#### 2023

- A324 A. Niggas, L. Fischer, S. Kretschmer, M. Werl, H. Biber, C. Speckmann, N. McEvoy, J. Kotakoski, **F. Aumayr**, A. V. Krasheninnikov, and R. A. Wilhelm  
*Charge-exchange-dependent energy loss of H and He in freestanding monolayers of graphene and MoS<sub>2</sub>*  
 Physical Review A **108** (2023) 062823 (8 pages)  
<https://doi.org/10.1103/PhysRevA.108.062823>
- A323 R.A. Wilhelm, M.J. Deuzeman, S. Rai, W. Husinsky, P.S. Szabo, H. Biber, R. Stadlmayr, C. Cupak, J. Hundsibichler, C. Lemell, W. Möller, A. Mutzke, G. Hobler, O.O. Versolato, **F. Aumayr**, and R. Hoekstra  
*On the missing single collision peak in low energy heavy ion scattering*  
 Nuclear Instruments and Methods in Physics Research B **544** (2023) 165123 (12 pages)  
<https://doi.org/10.1016/j.nimb.2023.165123>
- A322 J. Brötzner, C. Cupak, M. Fellinger, H. Biber, A. Lopez-Cazalilla, F. Granberg, F. Kporha, A. Mutzke, R. González-Arrabal, and **F. Aumayr**  
*Sputtering yield reduction for nano-columnar W surfaces under D ion irradiation*  
 Nuclear Materials and Energy **37** (2023) 101507 (6 pages)  
<https://doi.org/10.1016/j.nme.2023.101507>

A321 C. Cupak, A. Lopez-Cazalilla, H. Biber, J. Brötzner, M. Fellinger, F. Brandstätter, P. S. Szabo, A. Mutzke, F. Granberg, K. Nordlund, R. González-Arrabal, and **F. Aumayr**  
*Sputter yield reduction and fluence stability of numerically optimised nanocolumnar tungsten surfaces*  
Physical Review Materials **7** (2023) 065406 (11 pages)  
<https://doi.org/10.1103/PhysRevMaterials.7.065406>

A320 N. Jäggi, A. Mutzke, H. Biber, J. Brötzner, P. S. Szabo, **F. Aumayr**, P. Wurz, and A. Galli  
*New Compound and Hybrid Binding Energy Sputter Model for Modeling Purposes in Agreement with Experimental Data*  
The Planetary Science Journal **4** (2023) 86 (15 pages)  
<https://doi.org/10.3847/PSJ/acd056>

A319 C. Cupak, F. Brandstätter, R. Cserenyi, F. Troneberger, H. Biber, M. Fellinger, A. Redl, M.V. Moro, D. Böhm, Ch. Eisenmenger-Sittner, A. Mutzke, D. Primetzhofer, and **F. Aumayr**  
*Absence of synergistic effects in quasi-simultaneous sputtering of tungsten by Ar and D ions*  
Nuclear Materials and Energy **35** (2023) 101435 (9 pages)  
<https://doi.org/10.1016/j.nme.2023.101435>

A318 E. Pitthan, C. Cupak, M. Fellinger, M. V. Moro, S. Kioumourtzoglou, D. Moldarev, M. Wolff, **F. Aumayr**, and D. Primetzhofer  
*In-situ, real-time investigation of the formation of oxygen-containing rare-earth hydrides using a combination of a highly sensitive quartz crystal microbalance and ion beam analysis*  
Materialia **27** (2023) 101675 (7 pages)  
<http://dx.doi.org/10.1016/j.mtla.2023.101675>

## 2022

A317 A. Sagar Grossek, A. Niggas, R. A. Wilhelm, **F. Aumayr**, and C. Lemell  
*Model for nanopore formation in two-dimensional materials by impact of highly charged ions*  
Nano Letters **22** (2022) 9679 - 9684  
<https://doi.org/10.1021/acs.nanolett.2c03894>

A316 H. Biber, J. Brötzner, N. Jäggi, P. S. Szabo, J. Pichler, C. Cupak, C. Voith, B. Cserenyi, A. Nenning, A. Mutzke, M. V. Moro, D. Primetzhofer, K. Mezger, A. Galli, P. Wurz, and **F. Aumayr**  
*Sputtering behaviour of rough, polycrystalline mercury analogs*  
The Planetary Science Journal **3** (2022) 271 (10 pages)  
<https://doi.org/10.3847/PSJ/aca402>

A315 P. Dergham, **F. Aumayr**, E. Lamour, S. Macé, C. Prigent, S. Steydli, D. Vernhet, M. Werl, R. A. Wilhelm, and M. Trassinelli  
*Toward probing surface magnetism with highly charged ions*  
Atoms **10** (2022) 151 (6pages)  
<https://doi.org/10.3390/atoms10040151>

A314 P. S. Szabo, A. R. Poppe, H. Biber, A. Mutzke, J. Pichler, N. Jäggi, A. Galli, P. Wurz, and **F. Aumayr**  
*Deducing Lunar regolith porosity from energetic neutral atom emission*  
Geophysical Research Letters **49** (2022) e2022GL101232 (10 pages)  
<https://doi.org/10.1029/2022GL101232>

A313 G. F. Harrer, M. Faitsch, L. Radovanovic, E. Wolfrum, C. Albert, A. Cathey, M. Cavedon, M. Dunne, T. Eich, R. Fischer, M. Hoelzl, B. Labit, H. Meyer, and **F. Aumayr**  
*A quasi-continuous exhaust scenario for a fusion reactor: the renaissance of small edge localized modes*  
Physical Review Letters **129** (2022) 165001 (7 pages)  
<https://doi.org/10.1103/PhysRevLett.129.165001>

- A312 A. Niggas, J. Schwestka, K. Balzer, D. Weichselbaum, N. Schlünzen, R. Heller, S. Creutzburg, H. Inani, M. Tripathi, C. Speckmann, N. McEvoy, T. Susi, J. Kotakoski, Z. Gan, A. George, A. Turchanin, M. Bonitz, **F. Aumayr**, and R. A. Wilhelm  
*Ion-induced surface charge dynamics in freestanding monolayers of graphene and MoS<sub>2</sub> probed by the emission of electrons*  
Physical Review Letters **129** (2022) 086802 (9 pages)  
<https://doi.org/10.1103/PhysRevLett.129.086802>
- A311 N. S. Mühlisch, J. Gerger, B. Seifert, and **F. Aumayr**  
*Performance improvements of IFM Nano Thruster with highly focused ion beam generated with a compact electrostatic lens module*  
Acta Astronautica **201** (2022) 464 - 471  
<https://doi.org/10.1016/j.actaastro.2022.08.053>
- A310 C. Cupak, E. Pitthan, M. V. Moro, M. Fellinger, D. Primetzhofer, and **F. Aumayr**  
*Retention of deuterium in beryllium: A combined investigation using TDS, ERDA and EBS*  
Nuclear Materials and Energy **33** (2022) 101249 (7 pages)  
<https://doi.org/10.1016/j.nme.2022.101249>
- A309 N. S. Mühlisch, B. Seifert, E. Ceribas, J. Gerger and **F. Aumayr**  
*High-precision digital Faraday cups for FEEP thrusters*  
Journal of Instrumentation **17** (2022) P08008 (13 pages)  
<https://doi.org/10.1088/1748-0221/17/08/P08008>
- A308 A. Lopez-Cazalilla, C. Cupak, M. Fellinger, F. Granberg, P. S. Szabo, A. Mutzke, K. Nordlund, **F. Aumayr**, and R. González-Arrabal  
*Comparative study regarding the sputtering yield of nanocolumnar tungsten surfaces under Ar<sup>+</sup> irradiation*  
Physical Review Materials **6** (2022) 075402 (13 pages)  
<https://doi.org/10.1103/PhysRevMaterials.6.075402>
- A307 N. S. Mühlisch, J. Gerger, B. Seifert, and **F. Aumayr**  
*Simultaneously measured direct and indirect thrust of a FEEP thruster using novel thrust balance and beam diagnostics*  
Acta Astronautica **197** (2022) 107 - 114  
<https://doi.org/10.1016/j.actaastro.2022.05.009>
- A306 L. Radovanovic, M. Dunne, E. Wolfrum, G. F. Harrer, M. Faitsch, R. Fischer, **F. Aumayr**  
*Developing a physics understanding of the quasi-continuous exhaust regime: pedestal profile and ballooning stability analysis*  
Nuclear Fusion **62** (2022) 086004 (12 pages)  
<https://doi.org/10.1088/1741-4326/ac6d6a>
- A305 P. S. Szabo, D. Weichselbaum, H. Biber, C. Cupak, A. Mutzke, R. A. Wilhelm, and **F. Aumayr**  
*Graphical user interface for SDTrimSP to simulate sputtering, ion implantation and the dynamic effects of ion irradiation*  
Nuclear Instruments and Methods in Physics Research B **522** (2022) 47 – 53  
<https://doi.org/10.1016/j.nimb.2022.04.008>
- A304 P. S. Szabo, C. Cupak, H. Biber, N. Jäggi, A. Galli, P. Wurz, and **F. Aumayr**  
*Analytical model for the sputtering of rough surfaces*  
Surfaces and Interfaces **30** (2022) 101924 (11 pages)  
<https://doi.org/10.1016/j.surfin.2022.101924>

2021

- A303 S. Creutzburg, A. Niggas, D. Weichselbaum, P. L. Grande, **F. Aumayr**, and R. A. Wilhelm  
*Angle-dependent charge exchange and energy loss of slow highly charged ions in freestanding graphene*  
 Physical Review A **104** (2021) 042806 (8 pages)  
<https://doi.org/10.1103/PhysRevA.104.042806>
- A302 C. Cupak, P. S. Szabo, H. Biber, R. Stadlmayr, C. Grave, M. Fellinger, J. Brötzner, R. A. Wilhelm, W. Möller, A. Mutzke, M. V. Moro, and **F. Aumayr**  
*Sputter yields of rough surfaces: Importance of the mean surface inclination angle from nano- to microscopic rough regimes*  
 Applied Surface Science **570** (2021) 151204 (11 pages)  
<https://doi.org/10.1016/j.apsusc.2021.151204>
- A301 K. Kantre, P. S. Szabo, M. V. Moro, C. Cupak, R. Stadlmayr, L. Z. Medina, **F. Aumayr** and D. Primetzhofer  
*Combination of in-situ ion beam analysis and thermal desorption spectroscopy for studying deuterium implanted in tungsten*  
 Physica Scripta **96** (2021) 124004 (8 pages)  
<https://doi.org/10.1088/1402-4896/ac1a88>
- A300 A. Niggas, S. Creutzburg, J. Schwestka, B. Wöckinger, T. Gupta, P. L. Grande, D. Eder, J. P. Marques, B. C. Bayer, **F. Aumayr**, R. Bennett, R. A. Wilhelm  
*Peeling graphite layer by layer reveals the charge exchange dynamics of ions inside a solid*  
 Communications Physics **4** (2021) 180 (9 pages)  
<https://doi.org/10.1038/s42005-021-00686-1>
- A299 S. Creutzburg, M. Mergl, R. Hübner, I. Jirka, D. Erb, R. Heller, A. Niggas, P. L. Grande, **F. Aumayr**, R. A. Wilhelm, M. Kalbac, and S. Fácsko  
*Fluorination of graphene leads to susceptibility for nanopore formation by highly charged ion impact*  
 Physical Review Materials **5** (2021) 074007 (11 pages)  
<https://doi.org/10.1103/PhysRevMaterials.5.074007>
- A298 G. L. Szabo, M. Lehner, L. Bischoff, W. Pilz, H. Muckenhuber, U. Kentsch, **F. Aumayr**, N. Klingner, R. A. Wilhelm  
*Nano-hillock formation on CaF<sub>2</sub> due to individual slow Au-cluster impacts*  
 Nanotechnology **32** (2021) 355701 (7 pages)  
<https://doi.org/10.1088/1361-6528/ac037e>
- A297 N. Jäggi, A. Galli, P. Wurz, H. Biber, P. S. Szabo, J. Brötzner, **F. Aumayr**, P. M. E. Tollar, K. Mezger  
*Creation of Lunar and Hermean analogue mineral powder samples for solar wind irradiation experiments and mid-infrared spectra analysis*  
 Icarus **365** (2021) 114492 (13 pages)  
<https://doi.org/10.1016/j.icarus.2021.114492>

**2020**

- A296 N. S. Mühlrich, B. Seifert, and **F. Aumayr**  
*IFM NanoThruster performance studied by experiments and simulations*  
 Journal of Physics D: Applied Physics **54** (2020) 095203 (12 pages)  
<http://dx.doi.org/10.1088/1361-6463/abc84c>
- A295 P. S. Szabo, H. Biber, N. Jäggi, M. Wappl, R. Stadlmayr, D. Primetzhofer, A. Nenning, A. Mutzke, J. Fleig, K. Mezger, H. Lammer, A. Galli, P. Wurz, and **F. Aumayr**  
*Experimental insights into space weathering of Phobos: Laboratory investigation of sputtering by atomic and molecular planetary ions*  
 Journal of Geophysical Research: Planets **125** (2020) e2020JE006583 (17 pages)  
<http://dx.doi.org/10.1029/2020JE006583>

- A294 R. Stadlmayr, P. S. Szabo, H. Biber, H. R. Koslowski, E. Kadletz, C. Cupak, R. A. Wilhelm, M. Schmid, C. Linsmeier, and **F. Aumayr**  
*A high temperature dual-mode quartz crystal microbalance technique for erosion and thermal desorption spectroscopy measurements*  
*Review of Scientific Instruments* **91** (2020) 125104 (9 pages)  
<https://doi.org/10.1063/5.0012028>
- A293 J. Schwestka, H. Inani, M. Tripathi, A. Niggas, N. McEvoy, F. Libisch, **F. Aumayr**, J. Kotakoski, and R. A. Wilhelm  
*Atomic-scale carving of nanopores into a van der Waals heterostructure with slow highly charged ions*  
*ACS Nano* **14** (2020) 10536 – 10543  
<https://doi.org/10.1021/acsnano.0c04476>
- A292 H. Biber, P. S. Szabo, N. Jäggi, M. Wallner, R. Stadlmayr, M. V. Moro, A. Nenning, A. Mutzke, K. Mezger, H. Lammer, D. Primetzhofer, J. Fleig, A. Galli, P. Wurz, and **F. Aumayr**  
*Solar wind Helium ion interaction with Mg and Fe rich pyroxene as Mercury surface analogue*  
*Nuclear Instruments and Methods in Physics Research B* **480** (2020) 10 – 15  
<https://doi.org/10.1016/j.nimb.2020.07.021>
- A291 S. Creutzburg, J. Schwestka, A. Niggas, H. Inani, M. Tripathi, A. George, R. Heller, R. Kozubek, L. Madauß, N. McEvoy, S. Facsko, J. Kotakoski, M. Schleberger, A. Turchanin, P. L. Grande, **F. Aumayr**, and R. A. Wilhelm  
*Vanishing influence of the band gap on charge exchange of slow highly charged ions in freestanding single layer MoS<sub>2</sub>*  
*Physical Review B* **102** (2020) 045408 (8 pages)  
<https://doi.org/10.1103/PhysRevB.102.045408>
- A290 A. Niggas, J. Schwestka, S. Creutzburg, T. Gupta, D. Eder, B. C. Bayer, **F. Aumayr**, and R. A. Wilhelm  
*The role of contaminations in ion beam spectroscopy with freestanding 2D materials: a study on thermal treatment*  
*The Journal of Chemical Physics* **153** (2020) 014702 (7 pages)  
<https://doi.org/10.1063/5.0011255>
- A289 P.S. Szabo, H. Biber, N. Jäggi, M. Brenner, D. Weichselbaum, A. Niggas, R. Stadlmayr, D. Primetzhofer, A. Nenning, A. Mutzke, M. Sauer, J. Fleig, A. Foelske-Schmitz, K. Mezger, H. Lammer, A. Galli, P. Wurz, and **F. Aumayr**  
*Dynamic potential sputtering of lunar analog material by solar wind ions*  
*The Astrophysical Journal* **891** (2020) 100 (12 pages)  
<https://doi.org/10.3847/1538-4357/ab7008>
- A288 R. Stadlmayr, P.S. Szabo, D. Mayer, C. Cupak, W. Möller, and **F. Aumayr**  
*Erosion of iron-tungsten model films by deuterium ion irradiation: a benchmark for TRI3DYN*  
*Physica Scripta* **T171** (2020) 014021 (6 pages)  
<https://doi.org/10.1088/1402-4896/ab438f>
- A287 R. Stadlmayr, P.S. Szabo, D. Mayer, C. Cupak, T. Dittmar, L. Bischoff, S. Möller, M. Rasiński, R.A. Wilhelm, W. Möller, and **F. Aumayr**  
*Sputtering of nanostructured tungsten and comparison to modelling with TRI3DYN*  
*Journal of Nuclear Materials* **532** (2020) 152019 (9 pages)  
<https://doi.org/10.1016/j.jnucmat.2020.152019>
- A286 L. Ballauf, F. Hechenberger, R. Stadlmayr, T. Dittmar, M. Daxner, S. Zöttl, **F. Aumayr**, Z. Herman, and P. Scheier  
*Formation of beryllium-hydrogen ions in chemical sputtering from 20 to 420 eV*  
*Nuclear Materials and Energy* **22** (2020) 100722 (8 pages)  
<https://doi.org/10.1016/j.nme.2019.100722>

- A285 J. Schwestka, A. Niggas, S. Creutzburg, R. Kozubek, R. Heller, M. Schleberger, R.A. Wilhelm, and **F. Aumayr**  
*Charge-exchange-driven low-energy electron splash induced by heavy ion impact on condensed matter*  
*Journal of Physical Chemistry Letters* **10** (2019) 4805 - 4811  
<https://doi.org/10.1021/acs.jpclett.9b01774>
- A284 M. Akram, S. Bashir, S. Jalil, M. ElKabbash, **F. Aumayr**, A. Ajami, W. Husinsky, K. Mahmood, M. Rafique, and C. Guo  
*Femtosecond laser induced periodic surface structures for the enhancement of field emission properties of tungsten*  
*Optical Materials Express* **9** (2019) 3183 - 3192  
<https://doi.org/10.1364/OME.9.003183>
- A283 **F. Aumayr**, K. Ueda, E. Sokell, S. Schippers, H. Sadeghpour, F. Merkt, T. Gallagher, B. Dunning, P. Scheier, O. Echt, T. Kirchner, S. Fritzsche, A. Surzhykov, X. Ma, R. Rivarola, O. Fojon, L. Tribedi, E. Lamour, J.R. Crespo López-Urrutia, Y.A. Litvinov, V. Shabaev, H. Cederquist, H. Zettergren, M. Schleberger, R.A. Wilhelm, T. Azuma, P. Boduch, H.T. Schmidt, T. Stöhlker  
*Roadmap on photonic, electronic and atomic collision physics: III. Heavy particles: with zero to relativistic speeds*  
*Journal of Physics B: At. Mol. Opt. Phys.* **52** (2019) 171003 (51 pages)  
<http://dx.doi.org/10.1088/1361-6455/ab26ea>
- A282 S. Schippers, E. Sokell, **F. Aumayr**, H. Sadeghpour, K. Ueda, I. Bray, K. Bartschat, A. Murray, J. Tennyson, A. Dorn, M. Yamazaki, M. Takahashi, N. Mason, O. Novotný, A. Wolf, L. Sanche, M. Centurion, Y. Yamazaki, G. Laricchia, C. Surko, J. Sullivan, G. Gribakin, D.W. Savin, Y. Ralchenko, R. Hoekstra, G. O'Sullivan  
*Roadmap on photonic, electronic and atomic collision physics II. Electron and Antimatter interactions*  
*Journal of Physics B: At. Mol. Opt. Phys.* **52** (2019) 171002 (49 pages)  
<http://dx.doi.org/10.1088/1361-6455/ab26e0>
- A281 K. Ueda, E. Sokell, S. Schippers, **F. Aumayr**, H. Sadeghpour, J. Burgdörfer, C. Lemell, X.-M. Tong, T. Pfeifer, F. Calegari, A. Palacios, F. Martin, P. Corkum, G. Sansone, E.V. Gryzlova, A.N. Grum-Grzhimailo, M. Novella Piancastelli, P.M. Weber, T. Steinle, K. Amini, J. Biegert, N. Berrah, E. Kukk, R. Santra, A. Müller, D. Dowek, R.R. Lucchese, C.W. McCurdy, P. Bolognesi, L. Avaldi, T. Jahnke, M.S. Schöffler, R. Dörner, Y. Mairesse, L. Nahon, O. Smirnova, T. Schlathölter, E.E.B. Campbell, J.-M. Rost, M. Meyer, K.A. Tanaka  
*Roadmap on photonic, electronic and atomic collision physics I. Light- matter interaction*  
*Journal of Physics B: At. Mol. Opt. Phys.* **52** (2019) 171001 (62 pages)  
<http://dx.doi.org/10.1088/1361-6455/ab26d7>
- 2018**
- A280 G. F. Harrer, E. Wolfrum, M. G. Dunne, P. Manz, M. Cavedon, P. T. Lang, B. Kurzan, T. Eich, B. Labit, J. Stober, H. Meyer, M. Bernert, F. Laggner, and **F. Aumayr**  
*Parameter dependences of small edge localized modes (ELMs)*  
*Nuclear Fusion* **58** (2018) 112001 (10 pages)  
<https://doi.org/10.1088/1741-4326/aad757>
- A279 J. Schwestka, D. Melinc, R. Heller, A. Niggas, L. Leonhartsberger, H. Winter, S. Facsko, **F. Aumayr**, and R. A. Wilhelm  
*A versatile ion beam spectrometer for studies of ion interaction with 2D materials*  
*Review of Scientific Instruments* **89** (2018) 085101 (8 pages)  
<https://doi.org/10.1063/1.5037798>
- A278 R. A. Wilhelm, E. Gruber, J. Schwestka, R. Heller, S. Fascko, and **F. Aumayr**  
*Neutralization dynamics of slow highly charged ions in 2D materials*  
*Applied Sciences* **8** (2018) 1050 (16 pages)  
<https://doi.org/10.3390/app8071050>

- A277 E. Gruber, L. Bergen, P. Salou, E. Lattouf, C. Grygiel, Y.Y. Wang, A. Benyagoub, D. Levavasseur, J. Rangama, H. Lebius, B. Ban-d'Etat, M. Schleberger, and **F. Aumayr**  
*High resolution AFM studies of irradiated mica - Following the traces of swift heavy ions under grazing incidence*  
 Journal of Physics: Condensed Matter **30** (2018) 285001 (8 pages)  
<https://doi.org/10.1088/1361-648X/aac7f7>
- A276 P. S. Szabo, R. Chiba, H. Biber, R. Stadlmayr, B. M. Berger, D. Mayer, A. Mutzke, M. Doppler, M. Sauer, J. Appenroth, J. Fleig, A. Foelske-Schmitz, H. Hutter, K. Mezger, H. Lammer, A. Galli, P. Wurz, and **F. Aumayr**  
*Solar wind sputtering of wollastonite as a lunar analogue material – Comparisons between experiments and simulations*  
 Icarus **314** (2018) 98 - 105  
<https://doi.org/10.1016/j.icarus.2018.05.028>
- A275 R. Stadlmayr, P.S. Szabo, B.M. Berger, C. Cupak, R. Chiba, D. Blöch, D. Mayer, B. Stechauner, M. Sauer, A. Foelske-Schmitz, M. Oberkofler, T. Schwarz-Selinger, A. Mutzke, and **F. Aumayr**  
*Fluence dependent changes of surface morphology and sputtering yield of iron: Comparison of experiments with SDTrimSP-2D*  
 Nuclear Instruments and Methods in Physics Research B **430** (2018) 42 - 46  
<https://doi.org/10.1016/j.nimb.2018.06.004>
- A274 J. Schwestka, R. A. Wilhelm, E. Gruber, R. Heller, R. Kozubek, M. Schleberger, S. Facsko, and **F. Aumayr**  
*The role of radiative de-excitation in the neutralization process of highly charged ions interacting with a single layer of graphene*  
 Nuclear Instruments and Methods in Physics Research B **422** (2018) 63 - 67  
<https://doi.org/10.1016/j.nimb.2018.02.022>
- A273 F. M. Laggner, E. Wolfrum, M. Cavedon, M. G. Dunne, G. Birkenmeier, R. Fischer, M. Willensdorfer, and **F. Aumayr**  
*Plasma shaping and its impact on the pedestal of ASDEX Upgrade: Edge stability and inter-ELM dynamics at varied triangularity*  
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