

Scientific Publications

by Friedrich Aumayr

Overview

A.	Journal articles in international peer-reviewed ISI-listed journals	322
B.	Books, edited books, book chapters, and invited contributions to conferences	55
C.	Contributions in conference proceedings and other publications	284
	Total number of publications	661

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 Publons (ResearcherID) online at <https://publons.com/researcher/2876047/>.

A. Journal articles (peer-reviewed)

2023

- 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. Cserveny, 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. Cserveny, 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 MoS₂ 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. Mühllich, 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. Mühllich, 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⁺ irradiation
Physical Review Materials **6** (2022) 075402 (13 pages)
<https://doi.org/10.1103/PhysRevMaterials.6.075402>
- A307 N. S. Mühlrich, 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. Facsko
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 CaF₂ 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. Mühllich, 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 MoS₂
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>

2019

- 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.jpcllett.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>

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- 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. Fascko, **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, **F. Aumayr**
Plasma shaping and its impact on the pedestal of ASDEX Upgrade: Edge stability and inter-ELM dynamics at varied triangularity
 Nuclear Fusion **58** (2018) 046008 (13 pages)
<https://doi.org/10.1088/1741-4326/aaaa43>

- A272 F. M. Laggner, S. Keerl, J. Gnisen, E. Wolfrum, M. Bernert, D. Carralero, L. Guimarais, V. Nikolaeva, S. Potzel, M. Cavedon, F. Mink, M. G. Dunne, G. Birkenmeier, R. Fischer, E. Viezzler, M. Willensdorfer, M. Wischmeier, **F. Aumayr**
Divertor, scrape-off layer and pedestal particle dynamics in the ELM cycle on ASDEX Upgrade
 Plasma Physics and Controlled Fusion **60** (2018) 025002 (11 pages)
<http://dx.doi.org/10.1088/1361-6587/aa90bf>

2017

- A271 R.A. Wilhelm, E. Gruber, J. Schwestka, R. Kozubek, T.I. Madeira, J.P. Marques, J. Kobus, A.V. Krasheninnikov, M. Schleberger, and **F. Aumayr**
Interatomic coulombic decay - the mechanism for rapid de-excitation of hollow atoms
 Physical Review Letters **119** (2017) 103401 (6 pages)
<http://dx.doi.org/10.1103/PhysRevLett.119.103401>
- A270 B.M. Berger, R. Stadlmayr, D. Blöch, E. Gruber, K. Sugiyama, T. Schwarz-Selinger, and **F. Aumayr**
Erosion of Fe-W model system under normal and oblique D ion irradiation
 Nuclear Materials and Energy **12** (2017) 468 - 471
<http://dx.doi.org/10.1016/j.nme.2017.03.030>
- A269 B.M. Berger, P.S. Szabo, R. Stadlmayr, and **F. Aumayr**
Sputtering measurements using a quartz crystal microbalance as a catcher
 Nuclear Instruments and Methods in Physical Research B **406** (2017) 533 - 537
<http://dx.doi.org/10.1016/j.nimb.2016.11.039>
- A268 M. Gulka, E. Bourgeois, J. Hruby, P. Siyushev, G. Wachter, **F. Aumayr**, P.R. Hemmer, A. Gali, F. Jelezko, M. Trupke, and M. Nesladek
Pulsed photoelectric coherent manipulation and detection of NV center spins in diamond
 Physical Review Applied **7** (2017) 044032 (7 pages)
<https://doi.org/10.1103/PhysRevApplied.7.044032>
- A267 F. M. Laggner, E. Wolfrum, M. Cavedon, F. Mink, M. Bernert, M. G. Dunne, P. A. Schneider, A. Kappatou, G. Birkenmeier, R. Fischer, M. Willensdorfer, **F. Aumayr**
Pedestal structure and inter-ELM evolution for different main ion species in ASDEX Upgrade
 Physics of Plasmas **24** (2017) 056105 (8 pages)
<http://dx.doi.org/10.1063/1.4977461>
- A266 C. Dufour, V. Khomrenkov, Y.Y. Wang, Z.G. Wang, **F. Aumayr**, and M. Toulemonde
An attempt to apply the inelastic thermal spike model to surface modifications of CaF₂ induced by highly charged ions: Comparison to swift heavy ions and extension to some others material
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