

PUBLICATION LIST

PUBLICATIONS IN PEER-REVIEWED JOURNALS

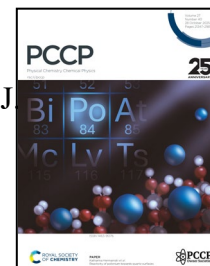
248) Dietzel, D., Yakushev, A., **Düllmann, Ch.E.**, Hermainiski, K., Ballof, J., Bartl, P., Cantemir, R., John, J., Krier, J., Mošat, P., Němec, M., Omtvedt, J.P., Štursa, J.
Reactivity and volatility of astatine in a quartz column.
J. Radioanal. Nucl. Chem. (2025) <https://doi.org/10.1007/s10967-025-10335-4>

247) Artes, E., Cavallo, P., Häger, T., Meyer, C.-C., Mokry, C., Renisch, D., Runke, J., Schaffner, E., Seibert, A., Trautmann, C., **Düllmann, Ch.E.**
Influence of carbon dioxide and water concentration on terbium thin films produced by Molecular Plating.
[Radiochim. Acta **113** \(2025\) 779-789.](#)

246) Moritz, D., Scharl, K., Wiesinger, M., Holthoff, G., Teschler, T., Hussain, M.I., Crespo López-Urrutia, J.R., Dickel, T., Ding, S., **Düllmann, Ch.E.**, Hudson, E.R., Kraemer, S., Löbell, L., Mokry, C., Runke, R., Seiferle, B., von der Wense, L., Zacherl, F., Thirof, P.G.
A cryogenic Paul trap for probing the nuclear isomeric excited state $^{229m}\text{Th}^{3+}$.
[Eur. Phys. J. D **79** \(2025\) 127.](#)

245) Hermainiski, K., Yakushev, A., Dietzel, D., **Düllmann, Ch.E.**, Ballof J., Mošat, P., Sprunk, F., Bartl, P., John, J., Krier, J., Omtvedt, J.P., Štursa, J.
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Laser fluence-dependent production of molecular thorium ions in different charge states for trapped-ion experiments.
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243) Wei, J., Yakushev, A., Ballof, J., Krier, J., **Düllmann, Ch.E.**
Atmospheric-pressure ion transfer in a gas flow device connected to the UniCell buffer gas cell for superheavy element chemistry: simulation studies.
[Nucl. Sci. Tech. **36** \(2024\) 187.](#)

242) Mosat, P., Khuyagbaatar, J., Ballof, J., Cantemir, R.A., Dietzel, D., **Düllmann, Ch.E.**, Hermainski, K., Hesberger, F.P., Jäger, E., Kindler, B., Krier, J., Kurz, N., Lommel, B., Löchner, S., Maiti, M., Sato, T.K., Schausten, B., Uusitalo, J., Wiczorek, P., Yakushev, A.
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Laser spectroscopy on the hyperfine structure and isotope shift of sympathetically cooled $^{229}\text{Th}^{3+}$ ions.

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240) Fischer, P., Stricker, J., **Düllmann, Ch.E.**, Renisch, D., Schweikhard, L.
Gas-phase thorium clusters from laser ablation suggest magicity of Th_{13}^{+} .

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A comparative study of target fabrication strategies for microgram muonic atom spectroscopy.

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Quasifission and deep inelastic collisions competing with superheavy element creation.

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Production and purification of molecular ^{225}Ac at CERN-ISOLDE.

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Ion implantation of the electron-capture nuclide ^{55}Fe for measurements by means of metallic microcalorimeters.

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In Memoriam: Jens Volker Kratz (1944-2024)

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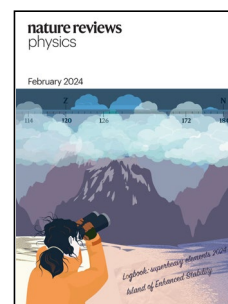
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In-source and in-trap formation of molecular ions in the actinide mass range at CERN-ISOLDE.

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First application of the phase-imaging ion-cyclotron resonance technique at TRIGA-Trap.

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3) Omtvedt, J.P., Alstad, J., Bjørnstad, T., **Düllmann, Ch.E.**, Folden, C.M., III, Gregorich, K.E., Hoffman, D.C., Nitsche, H., Polakova, D., Samadani, F., Skarnemark, G., Stavsetra, L., Sudowe, R., Zheng, L.

SISAK liquid-liquid extraction studies of rutherfordium and future plans to study heavier transactinides.

Proc. 8th Conf. Actinide Conf., Actinides 2005, July 04-08, 2005, Manchester, UK; in *Recent Advances in Actinide Science*, May, I., Alvares, R., Bryan, N. (Eds.); RSC Publishing: Cambridge, UK, 2006; pp 278-280.

2) **Düllmann, Ch.E.**, Pang, G.K., Folden, C.M., III, Gregorich, K.E., Hoffman, D.C., Nitsche, H., Sudowe, R., Zielinski, P.M.

Toward volatile metal complexes of rutherfordium - results of test experiments with Zr and Hf.

Proc. 6th International Conference on Nuclear and Radiochemistry, NRC 6, August 29 - September 3, 2004, Aachen, Germany; in *Advances in Nuclear and Radiochemistry*, General and Interdisciplinary; Qaim, S.M. and Coenen, H.H. (Eds.); Forschungszentrum Jülich GmbH: Jülich, Germany, 2004; Vol. 3., pp 147-149.

1) Sudowe, R., **Düllmann, Ch.E.**, Farina, L.M., Folden, C.M., III, Gregorich, K.E., Gallaher, S.E.H., Hoffman, D.C., Phillips, D.C., Schwantes, J.M., Wilson, R.E., Zielinski, P.M., Nitsche, H.

Zirconium and hafnium extraction using crown ethers - a model system for the study of rutherfordium.

Proc. 6th International Conference on Nuclear and Radiochemistry, NRC 6, August 29 - September 3, 2004, Aachen, Germany; in *Advances in Nuclear and Radiochemistry*, General and Interdisciplinary; Qaim, S.M. and Coenen, H.H. (Eds.); Forschungszentrum Jülich GmbH: Jülich, Germany, 2004; Vol. 3., pp 144-146.

CONTRIBUTIONS TO INTERNATIONAL CONFERENCES AND WORKSHOPS

Invited oral presentations

62) **Düllmann, Ch.E.**

Synthesis and chemical studies of superheavy elements.

7th Asia-Pacific Symposium on Radiochemistry 2025 (APSORC 25), September 14-19, 2025, Matsue, Japan

61) **Düllmann, Ch.E.**

Cold fusion: From element discovery to detailed studies – an overview from GSI.

Int. Conf. on 50 Years of Cold Fusion, November 20-23, 2024, Nat. Academy of Sciences of the Republic of Armenia, Yerevan, Armenia

60) **Düllmann, Ch.E.**

Progress in the experimental study of the superheavy elements.

EURORIB 2024 Conference, June 02-07, 2024, Lommel, Belgium.

59) **Düllmann, Ch.E.**

Progress in the production and study of chemical properties of superheavy elements.

3rd International Conference on Radioanalytical and Nuclear Chemistry (RANC-2023)
May 7-12, 2023, Budapest, Hungary.

58) **Düllmann, Ch.E.** on behalf of the TASCA chemistry collaboration

Chemical studies of the heaviest known elements: nihonium (element 113), flerovium (element 114), and moscovium (element 115).

5th International Conference on Application of RadiotraCers and Energetic Beams in Sciences (ARCEBS-23), January 31 – February 05, 2023, Sidho-Kanho-Birsha University, Purulia & Kushal Palli, Ajodhya Hills, India.

57) **Düllmann, Ch.E.**

Superheavy elements from present to future – Studies at a next-generation facility.

Workshop on Physics with SPIRAL2 Heavy Ion Beams, December 12-16, 2022, GANIL, Caen, France.

56) **Düllmann, Ch.E.**

Progress in the experimental study of the superheavy elements.

28th International Nuclear Physics Conference (INPC 2022), September 11-16, 2022, Cape Town, South Africa.

55) **Düllmann, Ch.E.**

Chemical studies of the heaviest known elements: nihonium (element 113), flerovium (element 114), and moscovium (element 115)

6th International Nuclear Chemistry Congress (INCC-6), August 29-September 02, 2022, Lanzhou, China. (Presented virtually).

54) Yakushev, A., **Düllmann, Ch.E.**

Superheavy element chemistry – from history to future.

19th Radiochemical Conference (RadChem 2022), May 15-20, 2022, Mariánské Lázně, Czech Republic.

53) **Düllmann, Ch.E.**

Superheavy Elements: Status 2021- Outlook 2022 and beyond.

NUSTAR Week 2021, October 04-08, 2021, Darmstadt, Germany. (Presented virtually)

52) **Düllmann, Ch.E.** for the ECHo collaboration

Production, isolation, characterization, and recycling of ¹⁶³Ho for ECHo.

ECT* Workshop: Determination of the effective electron (anti)-neutrino mass, February 10-14, 2020, Trento, Italy. (Presented virtually)

51) **Düllmann, Ch.E.**

The heavy actinides and transactinides – the radioelements at the end of the periodic table.

10th International Conference on Isotopes (10ICI), February 03-07, 2020, Kuala Lumpur, Malaysia.

50) **Düllmann, Ch.E.**

Superheavy element research at GSI – current status and short-term outlook.

4th International Symposium on Superheavy Elements (SHE 2019), December 01-05, 2019; Hakone, Japan

49) **Düllmann, Ch.E.**

118 und (k)ein Ende – neue Elemente im Periodensystem.

43. Clemens-Winkler Symposium, October 24, 2019, TU Bergakademie Freiberg, Germany.

48) **Düllmann, Ch.E.**

Radioisotope separation in support of fundamental physics research.

JRNC-RANC 2nd International Conference on Radioanalytical and Nuclear Chemistry (RANC 2019), May 05-10, 2019, Budapest, Hungary

47) **Düllmann, Ch.E.**

From actinides to superheavies and to the stars.

G.T. Seaborg Award Symposium for Thomas E. Albrecht-Schmitt, 257th National Meeting of the American Chemical Society, March 31 - April 04, 2019, Orlando, FL, USA

46) **Düllmann, Ch.E.**

The hunt for new elements – then and now. Part II: from the 1930s till today and beyond.

The Royal Institution, March 06, 2019, London, UK

45) **Düllmann, Ch.E.**

News from the chemistry of the heaviest elements around flerovium, element 114.

European Radioactive Ion Beam Conference, EURORIB 2018, May 27 - June 01, 2018, Giens, France

44) **Düllmann, Ch.E.**

Superheavy elements in the periodic table: how they fit, and why.

Gordon Research Conference in Nuclear Chemistry, June 18-23, 2017, Colby-Sawyer College, New London, NH, USA

43) **Düllmann, Ch.E.**

From Florence and Mainz to Canberra and Tasmania.

Workshop on Optimizing Trajectories in Science (OTIS), February 24-26, 2017, Ratho Farm, Bothwell, Tasmania, Australia

42) **Düllmann, Ch.E.**

How elements up to 118 were reached and how to go beyond.

International Conference on Heavy-Ion Collisions at Near-Barrier Energies (FUSION17), February 20-24, 2017, Hobart, Tasmania, Australia

41) **Düllmann, Ch.E.**

Current guidance from theory on synthesis and decay properties of the new element 120: sufficient for a successful search experiment?

Low Energy Nuclear Reaction Theory Workshop (LENRT), February 15-17, 2017, ANU Canberra, Australia.

40) **Düllmann, Ch.E.**

On the search for elements beyond $Z=118$.

6th International Conference on Fission and Properties of Neutron-Rich Nuclei (ICFN6), November 06-12, 2016, Sanibel, FL, USA.

39) **Düllmann, Ch.E.**

Superheavy elements – How element 118 was reached and how to go beyond.

XXIII Nuclear Physics Workshop "Marie & Pierre Curie", September 27 - October 02, 2016, Kazimierz Dolny, Poland.

38) **Düllmann, Ch.E.**

Developments in the chemistry of the heaviest elements.

9th International Conference on Nuclear and Radiochemistry (NRC9), August 29 - September 02, 2016, Helsinki, Finland.

37) **Düllmann, Ch.E.**

Search for Elements Beyond $Z=118$ and Future SHE Research Opportunities at GSI.

Nobel Symposium NS 160 on Chemistry and Physics of Heavy and Superheavy Elements, May 29 - June 03, 2016, Bäckaskog Castle, Sweden.

36) **Düllmann, Ch.E.** for the ECHo collaboration

Production and chemical isolation of ^{163}Ho for ECHo.

ECT* Workshop: Determination of the absolute electron (anti-)neutrino mass, April 04-08, 2016, Trento, Italy.

35) **Düllmann, Ch.E.**

Superheavy element research at GSI.

IOP Annual Nuclear Physics Conference, March 30 - April 01, 2016, Liverpool, UK.

(Plenary speaker)

34) **Düllmann, Ch.E.** for the TASCA collaboration

Search for new superheavy elements with $Z=119$ and $Z=120$ at the gas-filled recoil separator TASCA at GSI Darmstadt.

12th International Conference on Nucleus-Nucleus Collisions (NN2015), June 21-26, 2015, Catania, Italy.

33) **Düllmann, Ch.E.**

Chemistry and physics of (super-)heavy elements.

Summer school on actinide science and applications, June 15-19, 2015, Karlsruhe, Germany.

32) **Düllmann, Ch.E.**

Chemical studies of the heaviest elements: an overview on recent achievements.

U.S. Department of Energy, Office of Science, Basic Energy Sciences 2015 Heavy Element Chemistry and Separations Science Principal Investigators' Meeting, April 19-22, 2015, Gaithersburg, MD, USA.

(Keynote speaker, Opening talk)

31) **Düllmann, Ch.E.**

Chemical studies of the heaviest elements.

International Symposium on Superheavy Nuclei (SHE-2015), March 31 - April 02, 2015, Texas A&M University, College Station, TX, USA.

30) Wilson, R.E., **Düllmann, Ch.E.**

Scientific Contributions of Heino Nitsche to Superheavy Element Research.

G.T. Seaborg Award Symposium for Heino Nitsche, 249th American Chemical Society National Meeting and Exposition, March 22-26, 2015, Denver, CO, USA.

29) **Düllmann, Ch.E.**

Advanced studies of element 115 and 117 decay chains.

VII International Symposium on Exotic Nuclei (EXON-2014), September 08-13, 2014, Kaliningrad, Russia.

28) **Düllmann, Ch.E.**

Superheavy element research at GSI.

G.T. Seaborg Award Symposium for Walter Loveland, 247th National Meeting of the American Chemical Society, March 16-20, 2014, Dallas, TX, USA.

27) **Düllmann, Ch.E.**

The search for new chemical elements and the possibilities to synthesize transactinide "chemistry" isotopes.

5th Asia-Pacific Symposium on Radiochemistry, APSORC 13, September 22-27, 2013, Kanazawa, Japan.

26) **Düllmann, Ch.E.**

The search for new chemical elements and the possibilities to synthesize transactinide "chemistry" isotopes.

8th Workshop on the chemistry of the heaviest elements, CHE 8, September 19-21, 2013, Takayama, Japan.

25) **Düllmann, Ch.E.** for the TASCA collaboration.

Studies of superheavy nuclei at TASCA.

33rd Mazurian Lakes Conference on Nuclear Physics, September 01-06, 2013, Piaski, Poland.

24) **Düllmann, Ch.E.** for the TASCA and TASI Spec collaborations.

Superheavy elements studied with TASCA at GSI.

Int. Conf. on Nuclear Physics: Presence and Future, May 29 - June 05, 2013, Hotel Jakobsberg, Boppard am Rhein, Germany.

23) **Düllmann, Ch.E.**

Superheavy element research at GSI - recent results and future plans.

Heavy Ion Accelerator Symposium on Fundamental and Applied Science (HIAS 2013), April 08 - 12, 2013, Australian National University, Canberra, Australia.

22) **Düllmann, Ch.E.** for the TASCA collaboration.

Superheavy element research at TASCA at GSI.

5th International conference on fission and properties of neutron-rich nuclei, ICFN5, November 04-10, 2012, Sanibel Island, FL, USA.

21) **Düllmann, Ch.E.**

Quest for superheavy elements.

Ecole Joliot-Curie School: Nuclei through the looking glass: high intensity stable and ISOL beam frontier", September 30 - October 05, 2012, Fréjus, France.

(Three invited lectures)

20) **Düllmann, Ch.E.**

Search for Superheavy Elements at GSI.

10th International Conference on Clustering Aspects of Nuclear Structure and Dynamics, CLUSTER12, September 24-28, 2012, Debrecen, Hungary.

19) **Düllmann, Ch.E.**

Recoil Separator experiments with highly intense stable beams: status and perspectives.
ECOS 2012: Advances and challenges in nuclear physics with high intensity stable beams,
June 18-21, 2012, Lovenno di Menaggio, Italy.

18) **Herzberg, R.-D., Düllmann, Ch.E.**

Summary - Experiment.
ENSAR-ECOS Workshop on FUTURE SuperHEavy Element Strategy, FUSHE2012, May 13-16, 2012, Weilrod, Germany.

17) **Düllmann, Ch.E.**

Superheavy element research at GSI.
4th International Conference on the Chemistry and Physics of the Transactinide Elements,
TAN'11, September 05-11, 2011, Sochi, Russian Federation.

16) **Düllmann, Ch.E.**

Superheavy element research at GSI.
5th International Conference FUSION 11, May 02-06, 2011, Saint-Malo, France.

15) **Düllmann, Ch.E.**

Heavy element research at the recoil separator TASCA at GSI.
241st National Meeting of the American Chemical Society, March 27-31, 2011, Anaheim,
CA, USA.

14) **Düllmann, Ch.E.**

Future heavy element plans at GSI.
Workshop on "Future Directions in Heavy Element Science" (FDHES), December 10-11,
2010, Lawrence Berkeley National Laboratory, Berkeley, CA, USA.

13) **Düllmann, Ch.E.**

Chemie der schwersten Elemente.
"Komitee Hadronen und Kerne" (KHuK) Jahrestagung 2010, December 02-03, 2010, Bad
Honnef, Germany.

12) **Düllmann, Ch.E.**

Superheavy element research at GSI.
2nd International Conference on Application of Radiotracers in Chemical, Environmental and
Biological Sciences, ARCEBS-10, November 07-13, 2010, Kolkata, India.

11) **Düllmann, Ch.E.**

Element 114 – Aktuelles vom lange gesuchten Schwergewicht.
DPG Frühjahrstagung 2010, Fachverband Hadronen und Kerne, March 15-19, 2010, Bonn,
Germany.
(Hauptvortrag)

10) **Düllmann, Ch.E.** for a GSI Darmstadt – TU Munich – U Mainz – U Liverpool – LBNL Berkeley – UC Berkeley – SINP Kolkata – U Oslo – Lund U – U Jyväskylä – ITE Warsaw collaboration (the TASCA Element 114 Physics Collaboration).

Synthesis of element 114 at TASCA.

Annual NUSTAR Meeting, March 03-05, 2010, GSI Helmholtzzentrum für Schwerionenforschung GmbH, Darmstadt, Germany.

9) **Düllmann, Ch.E.**

Superheavy elements.

XLI. Arbeitstreffen Kernphysik, February 18-25, 2010, Schleching, Germany.

(Main overview speaker for this topic, three invited lectures)

8) **Düllmann, Ch.E.**

Chemistry behind a separator: lessons from BGS and TASCA for S3.

Super Separator Spectrometer Workshop, June 15-17, 2009, GANIL, Caen, France.

7) **Düllmann, Ch.E.**

GSI nuclear chemistry studies of superheavies.

International Symposium “Periodic Table of D.I. Mendeleev. The new superheavy elements”, January 20-21, 2009, Dubna, Russian Federation.

6) **Düllmann, Ch.E.**

Chemical properties of the heaviest elements.

International WE-Heraeus Summer School "Atomic Properties of the Heaviest Elements – from "hot" fusion to ultracold ions", August 24 - September 6, 2008, Wittenberg, Germany.

(Three invited lectures)

5) **Düllmann, Ch.E.**

Physical separators for the heaviest elements.

XVth International Conference on Electromagnetic Isotope Separators and Techniques Related to their Applications, EMIS2007, June 24-29, 2007, Deauville, France.

(Overview talk)

4) **Düllmann, Ch.E.**

Chemical investigations of superheavy elements – current results and new techniques.

Tours Symposium on Nuclear Physics VI, TOURS 2006, September 5-8, 2006, Tours, France.

(Overview talk)

3) **Düllmann, Ch.E.**, Pang, G.K., Garcia, M.A., Gregorich, K.E., Folden, C.M., III, Gates, J.M., Hoffman, D.C., Nelson, S.L., Sudowe, R., Nitsche, H.

Toward a new compound class of transactinides – studies with volatile group 4 metal complexes with hexafluoroacetylacetone.

2005 International Chemical Congress of Pacific Basin Societies, PACIFICHEM 2005, December 15-20, 2005, Honolulu, HI, USA.

2) **Düllmann, Ch.E.**

How do transactinide chemists volatilize group 4-8 elements?

Workshop on Targets and Ion Sources, May 23-25, 2005, Oak Ridge National Laboratory, ORNL, Oak Ridge, TN, USA.

1) **Düllmann, Ch.E.**

Chemical investigations of element 108, hassium.

2nd International Conference on the Chemistry and Physics of the Transactinide Elements, TAN 03, November 16-20, 2003, Napa, CA, USA.

Contributed oral presentations

39) **Düllmann, Ch.E.**

Long-lived actinide isotopes for off-line studies at ISOLDE and elsewhere

Workshop on fundamental symmetries in nuclei, atoms, and molecules, March 24-26, 2025, CERN, Switzerland

38) **Düllmann, Ch.E.**

Heavy element studies from the actinides to the superheavies.

77th International Symposium on Molecular Spectroscopy, (ISMS), Mini-Symposium on Heavy-Element Spectroscopy, June 17-21, 2024, Univ. of Illinois, Urbana-Champaign, IL, USA.

37) **Düllmann, Ch.E.**

How we study the chemistry of transactinides in the gas phase.

Actinides 2023 Int. Conf., June 05-08, 2023, Colorado School of Mines, Golden CO, USA

36) **Düllmann, Ch.E.**

Key aspects of actinide target production for superheavy element studies using high-intensity stable beams.

Workshop on Physics with SPIRAL2 Heavy Ion Beams, December 12-16, 2022, GANIL, Caen, France.

35) **Düllmann, Ch.E.**, Artes, E., Dragoun, A., Haas, R., Jäger, E., Kindler, B., Lommel, B., Mangold, K.-M., Meyer, C.-C., Mokry, C., Munnik, F., Rapps, M.(†), Renisch, D., Runke, J., Seibert, A., Stöckl, M., Thörle-Pospiech, P., Trautmann, C., Trautmann, N., Yakushev, A.
Advancements in the fabrication and characterization of actinide targets for superheavy element production.

19th Radiochemical Conference, RadChem 2022, May 15-20, 2022, Marianske Lazne, Czech Republic

34) **Düllmann, Ch.E.**

Key aspects for the production of the ideal actinide target for the production of superheavy elements.

18th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 21.

June 21-23, 2021, GSI Helmholtzzentrum für Schwerionenforschung GmbH, GSI, Darmstadt, Germany. (Presented virtually)

33) **Düllmann, Ch.E.**, Eberhardt, K., Haas, R., Kratz, J.V., Renisch, D., Runke, J., Mokry, C., Thörle-Pospiech, P., Trautmann, N.

Actinide sample production at Mainz University for applications in chemistry and physics research.

18th Radiochemical Conference, RadChem 2018, May 13-18, 2018, Marianske Lazne, Czech Republic.

32) Renisch, D., Beyer, T., Blaum, K., Block, M., **Düllmann, Ch.E.**, Eberhardt, K., Eibach, M., Grund, J., Nagy, Sz., Nörtershäuser, W., Schneider, F.

Mapping the $N = 152$ deformed shell closure with high-precision Penning-trap mass measurements of transuranium nuclides at TRIGA-TRAP.

5th International Conference on the Chemistry and Physics of the Transactinide Elements, TAN 15, May 25-29, 2015, Urabandai, Fukushima, Japan.

31) **Düllmann, Ch.E.**

Superheavy element research at GSI on the way to FAIR.

NUSTAR Week 2014, September 22-26, 2014, Valencia, Spain.

30) Eberhardt, K., **Düllmann, Ch.E.**, Chrysalidis, K., Dorrer, H., Gastaldo, L., Haas, R., Kieck, T., Köster, U., Kron, T., Lahiri, S., Maiti, M., Richter, S., Scheider, F., Szücs, Z., Takács, S., Türler, A., Wendt, K. for the ECHO-Collaboration

Production of radiochemically pure ^{163}Ho sources for the ECHO experiment.

DPG Frühjahrstagung 2014, Fachverband Teilchenphysik, March 24-28, 2014, Mainz, Germany.

29) **Düllmann, Ch.E.** for the TASCA collaboration

Suche nach neuen superschweren Elementen am TASCA Separator an der GSI.

Wissenschaftsforum Chemie der Gesellschaft Deutscher Chemiker, September 01-04, 2013, Darmstadt, Germany.

28) **Düllmann, Ch.E.** for the TASCA collaboration

Superheavy elements studied with TASCA at GSI.

International Nuclear Physics Conference 2013, INPC 2013, June 02-07, 2013, Florence, Italy.

27) **Düllmann, Ch.E.**

Perspectives of carbonyl chemistry for SHE.

9th ASRC International Workshop "Chemistry of the superheavy elements", March 08, 2013, RIKEN, Wako-shi, Saitama, Japan.

26) **Düllmann, Ch.E.**

Search for element 119.

11th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 12.

September 14, 2012, GSI Helmholtzzentrum für Schwerionenforschung GmbH, GSI, Darmstadt, Germany.

25) **Düllmann, Ch.E.** for the TASCA Element-114 Chemistry Collaboration

Element 114 is a volatile metal.

EuCheMS 8th International Conference on Nuclear and Radiochemistry, NRC-8, Sep. 16-21, 2012, Como, Italy.

- 24) **Düllmann, Ch.E.** for the TASCA Element-120 Collaboration
Die Synthese neuer superschwerer Elemente an der GSI: Suche nach Element 120 am Rückstoßseparator TASCA.
DPG Frühjahrstagung 2012, Fachverband Hadronen und Kerne, March 19-23, 2012, Mainz, Germany. (Gruppenbericht)
- 23) **Düllmann, Ch.E.**
Superheavy elements: research activities in Mainz and at GSI.
EMG Annual Retreat, September 27-29, 2010, Bingen am Rhein, Germany.
- 22) **Düllmann, Ch.E.**
TASCA experiments with the reaction $^{244}\text{Pu} + ^{48}\text{Ca}$ leading to element 114: high cross sections and the new nucleus ^{277}Hs .
Zakopane Conference on Nuclear Physics – Extremes of the Nuclear Landscape, August 30 - September 6, 2010, Zakopane, Poland.
- 21) **Düllmann, Ch.E.**
Transuranium target based superheavy element research at GSI.
240th National Meeting of the American Chemical Society, August 22-26, 2010, Boston, MA, USA.
- 20) **Düllmann, Ch.E.**
Experiments beyond element 118.
8th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 08.
October 15, 2009, GSI Helmholtzzentrum für Schwerionenforschung GmbH, GSI, Darmstadt, Germany.
- 19) **Düllmann, Ch.E.** for a GSI Darmstadt – TU Munich – U Mainz – U Liverpool – LBNL Berkeley – UC Berkeley – SINP Kolkata – U Oslo – Lund U – U Jyväskylä – ITE Warsaw collaboration (the TASCA Element 114 Physics Collaboration).
Synthesis of element 114 at TASCA.
8th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 08.
October 15, 2009, GSI Helmholtzzentrum für Schwerionenforschung GmbH, GSI, Darmstadt, Germany.
- 18) **Düllmann, Ch.E.** for a GSI Darmstadt – TU Munich – U Mainz – U Liverpool – LBNL Berkeley – UC Berkeley – SINP Kolkata – U Oslo – Lund U – U Jyväskylä – ITE Warsaw collaboration (the TASCA Element 114 Physics Collaboration).
Synthesis of element 114 at TASCA.
7th Workshop on the Chemistry of the Heaviest Elements, October 11-13, 2009, Mainz, Germany.
- 17) **Düllmann, Ch.E.**
Decay properties of "chemistry isotopes" of light even-Z transactinides.
7th Workshop on the Chemistry of the Heaviest Elements, October 11-13, 2009, Mainz, Germany.

16) **Düllmann, Ch.E.**

Physikalische Vorseparation – Eine neue Technik für spannende Chemieexperimente mit schwersten Elementen.

GDCh-Wissenschaftsforum Chemie 2009, August 30 - September 02, 2009, Frankfurt am Main, Germany.

15) **Düllmann, Ch.E.** for the upcoming TASCA-117 collaboration.

Toward element 117.

7th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 08.

October 31, 2008, GSI Helmholtzzentrum für Schwerionenforschung GmbH, GSI, Darmstadt, Germany.

14) **Düllmann, Ch.E.**

Investigation of group 8 metallocenes @ TASCA.

7th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 08.

October 31, 2008, GSI Helmholtzzentrum für Schwerionenforschung GmbH, GSI, Darmstadt, Germany.

13) **Düllmann, Ch.E.**

Investigation of group 8 metallocenes @ TASCA.

6th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 07, September 28, 2007, Davos, Switzerland.

12) **Düllmann, Ch.E.** for the TASCA RTC Working Group

Recoil Transfer Chamber commissioning at TASCA.

6th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 07, September 28, 2007, Davos, Switzerland.

11) **Düllmann, Ch.E.**, Gregorich, K.E., Pang, G.K., Dragojević, I., Eichler, R., Folden, III, C.M., Garcia, M.A., Gates, J.M., Hoffman, D.C., Nelson, S.L., Sudowe, R., Nitsche, H.

Toward new compound classes of transactinides: studies of volatile group 4 element metal complexes with hexafluoroacetylacetone.

3rd International Conference on the Chemistry and Physics of the Transactinide Elements, TAN 07, September 23-28, 2007, Davos, Switzerland.

10) **Düllmann, Ch.E.** for the RTC Working Group

Report of the "Recoil Transfer Chamber" working group.

5th Workshop on Recoil Separator for Superheavy Element Chemistry, TASCA 06, September 29, 2006, TU Munich, Garching, Germany.

9) **Düllmann, Ch.E.**

Chemistry experiments with long-lived pre-separated transactinides - today's achievements and challenges for tomorrow's experiments.

375. Wilhelm und Else Heraeus-Seminar, Workshop on the Atomic Properties of the Heaviest Elements, September 25-27, 2006, Abtei Frauenwörth im Chiemsee, Germany.

8) **Düllmann, Ch.E.**

Physical preseparation: a powerful new method for transactinide chemists.

International Symposium on Exotic Nuclei, EXON 2006, July 17-23, 2006, Khanty-Mansiysk, Russian Federation.

7) **Düllmann, Ch.E.**

Physical preseparation for chemistry experiments - an overview and an example.

15th Radiochemical Conference, RadChem 2006, April 23-28, 2006, Mariánské Lázně, Czech Republic.

6) **Düllmann, Ch.E.**, Pang, G.K., Gregorich, K.E., Sudowe, R., Nitsche, H.

Gas phase chemistry at the BGS: scientific opportunities and technical challenges.

3rd Workshop on Recoil Separator for Superheavy Element Chemistry, August 27, 2004, Gesellschaft für Schwerionenforschung, GSI, Darmstadt, Germany.

5) **Düllmann, Ch.E.**, Pang, G.K., Gregorich, K.E., Folden, C.M., III, Hoffman, D.C., Sudowe, R., Zielinski, P.M., Nitsche, H.

Investigation of volatile metal complexes @ BGS.

BGS/CHEMSEP Workshop, November 21, 2003, Lawrence Berkeley National Laboratory, LBNL, Berkeley, USA.

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