

List of publications

Senior Assist. Prof. Dr. Diana Kocheva

Publications in journals with impact factor

1. D. Kalaydjieva, **D. Kocheva**, G. Rainovski, V. Karayonchev, J. Jolie, N. Pietralla, M. Beckers, A. Blazhev, A. Dewald, M. Djongolov, A. Esmaylzadeh, C. Fransen, K. A. Gladnishki, A. Goldkuhle, C. Henrich, I. Homm, K. E. Ide, P. R. John, R. Kern, J. Kleemann, Th. Kröll, C. Müller-Gatermann, M. Scheck, P. Spagnoletti, M. Stoyanova, K. Stoychev, V. Werner, A. Yaneva, S. S. Dimitrova, G. De Gregorio, H. Na?dja, and A. Gargano
Physical Review C **104**, 024311 (2021);
Microscopic structure of the one-phonon 2^+ states of ^{208}Po
2. V. Karayonchev, M. Stoyanova, G. Rainovski, J. Jolie, A. Blazhev, M. Djongolov, A. Esmaylzadeh, C. Fransen, K. Gladnishki, L. Knafla, **D. Kocheva**, L. Kornwebel, J.-M. Régis, G. De Gregorio, and A. Gargano
Physical Review C **103**, 044309 (2021);
Lifetimes and structures of low-lying negative-parity states of ^{209}Po
3. Ma. von Tresckow, M. Rudigier, T.M. Shneidman, Th. Kröll, M. Boromiza, C. Clisu, C. Costache, D. Filipescu, N.M. Florea, I. Gheorghe, K. Gladnishki, A. Ionescu, **D. Kocheva**, R. Lică, N. Mărginean, R. Mărginean, K.R. Mashtakov, C. Mihai, R.E. Mihai, A. Negret, C.R. Nita, A. Olacel, A. Oprea, S. Pascu, G. Rainovski, T. Sava, M. Scheck, P. Spagnoletti, C. Sotty, L. Stan, I. Stiru, S. Toma, A. Turturică, S. Ujeniuc
Physics Letters B **821**, 136624 (2021);
New evidence for alpha clustering structure in the ground state band of ^{212}Po
4. A. Fernández, A. Jungclauss, P. Golubev, D. Rudolph, L. G. Sarmiento, A. Gargano, H. Naidja, A. Astier, E. Dupont, A. Gadea, E. Nácher, A. Perea, K. Wimmer, E. Clément, G. Fremont, J. Goupil, C. Houarner, B. Jacquot, A. Korichi, A. Lemasson, H. J. Li, J. Ljungvall, L. Ménager, R. M. Pérez-Vidal, C. M. Petrache, D. Ralet, J. A. Ropert, F. Saillant, A. Samark-Roth, G. S. Simpson, C. Spitaels, M. Zielinska, S. Ansari, J. Dudouet, A. Illana, M. Jurado, **D. Kocheva**, N. Lalović, Ch. Lorenz, B. Quintana, G. Rainovski, N. Redon, G. Tocabens, D. Barrientos, G. Benzoni, B. Birkenbach, A. J. Boston, H. C. Boston, A. Bracco, M. Ciemala, J. Collado, D. M. Cullen, C. Domingo-Pardo, J. Eberth, V. González, L. J. Harkness-Brennan, H. Hess, D. S. Judson, W. Korten, S. Leoni, A. Maj, R. Menegazzo, D. Mengoni, C. Michelagnoli, B. Million, D. R. Napoli, J. Nyberg, Zs. Podolyak, A. Pullia, P. Reiter, E. Sanchis, O. Stezowski, Ch. Theisen, and J. J. Valiente-Dobón
Physical Review C **104**, 054316 (2021);
Reinterpretation of excited states in ^{212}Po : Shell-model multiplets rather than α -cluster states
5. A. Yaneva, **D. Kocheva**, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, A. Dewald, M. Djongolov, C. Fransen, K. A. Gladnishki, C. Henrich, I. Homm, K. E. Ide, P. R.

- John, D. Kalaydjieva, V. Karayonchev, R. Kern, J. Kleemann, Th. Kröll, C. Müller-Gatermann, M. Scheck, P. Spagnoletti, M. Stoyanova, V. Werner
European Physical Journal A **56**: 246 (2020);
Experimental evidence for low-lying quadrupole isovector excitation of ^{208}Po
6. R. Kern, R. Zidarova, N. Pietralla, G. Rainovski, R. Stegmann, A. Blazhev, A. Boukhari, J. Cederkäll, J. G. Cubiss, M. Djongolov, C. Fransen, L. P. Gaffney, K. Gladnishki, E. Giannopoulos, H. Hess, J. Jolie, V. Karayonchev, L. Kaya, J. M. Keatings, **D. Kocheva**, Th. Kröll, O. Möller, G. G. O'Neill, J. Pakarinen, P. Reiter, D. Rosiak, M. Scheck, J. Snall, P.-A. Söderström, P. Spagnoletti, M. Stoyanova, S. Thiel, A. Vogt, N. Warr, A. Welker, V. Werner, J. Wiederhold, and H. De Witte
Physical Review C **102**, 041304(R) (2020);
Restoring the valence-shell stabilization in ^{140}Nd
 7. M. Stoyanova, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, M. Beckers, A. Dewald, M. Djongolov, A. Esmaylzadeh, C. Fransen, L. M. Gerhard, K. A. Gladnishki, S. Herb, P. R. John, V. Karayonchev, J. M. Keatings, R. Kern, L. Knafla, **D. Kocheva**, L. Kornwebel, Th. Kröll, M. Ley, K. M. Mashtakov, C. Müller-Gatermann, J.-M. Régis, M. Scheck, K. Schomacker, J. Sinclair, P. Spagnoletti, C. Sürder, N. Warr, V. Werner, and J. Wiederhold
Physical Review C **100**, 064304 (2019);
Lifetimes of the 4_2^+ states of ^{206}Po and ^{204}Po : A study of the transition from noncollective seniority-like mode to collectivity
 8. D. Ralet, E. Clément, G. Georgiev, A.E. Stuchbery, M. Rejmund, P. Van Isacker, G. de France, A. Lemasson, J. Ljungvall, C. Michelagnoli, A. Navin, D.L. Balabanski, L. Atanasova, A. Blazhev, G. Bocchi, R. Carroll, J. Dudouet, E. Dupont, B. Fornal, S. Franchoo, C. Fransen, C. Müller-Gatermann, A. Goasduff, A. Gadea, P.R. John, **D. Kocheva**, T. Konstantinopoulos, A. Korichi, A. Kusoglu, S.M. Lenzi, S. Leoni, R. Lozeva, A. Maj, R. Perez, N. Pietralla, C. Shand, O. Stezowski, D. Wilmsen, D. Yordanov, D. Barrientos, P. Bednarczyk, B. Birkenbach, A.J. Boston, H.C. Boston, I. Burrows, B. Cederwall, M. Ciemala, J. Collado, F. Crespi, D. Cullen, H.J. Eberth, J. Goupil, L. Harkness, H. Hess, A. Jungclaus, W. Korten, M. Labiche, R. Menegazzo, D. Mengoni, B. Million, J. Nyberg, Zs. Podolyák, A. Pullia, B. Quintana Arnés, F. Recchia, P. Reiter, F. Saillant, M.D. Salsac, E. Sanchis, C. Theisen, J.J. Valiente Dobon, O. Wieland
Physics Letters B **797**, 134797 (2019) ;
Evidence of octupole-phonons at high spin in ^{207}Pb
 9. **D. Kocheva**, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, R. Altenkirch, S. Ansari, A. Astier, M. Bast, M. Beckers, Th. Braunroth, M. Cappellazzo, A. Dewald, F. Diel, M. Djongolov, C. Fransen, K. Gladnishki, A. Goldkuhle, A. Hennig, V. Karayonchev, J. M. Keatings, E. Kluge, Th. Kröll, J. Litzinger, K. Moschner, C. Müller-Gatermann, P. Petkov, M. Scheck, Ph. Scholz, T. Schmidt, P. Spagnoletti, C. Stahl, R. Stegmann, A. Stolz, A. Vogt, N. Warr, V. Werner, D. Wölk, J. C. Zamora, K. O. Zell, V. Yu. Ponomarev, and P. Van Isacker
Physical Review C **96**, 044305 (2017);
"Low collectivity of the 2_1^+ state of ^{212}Po "

10. **D. Kocheva**, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, A. Astier, R. Altenkirch, S. Ansari, Th. Braunroth, M.L. Cortés, A. Dewald, F. Diel, M. Djongolov, C. Fransen, K. Gladnishki, A. Hennig, V. Karayonchev, J.M. Keatings, E. Kluge, J. Litzinger, C. Müller-Gatermann, P. Petkov, M. Rudigier, M. Scheck, Ph. Scholz, P. Spagnoletti, M. Spieker, C. Stahl, R. Stegmann, M. Stoyanova, P. Thöle, N. Warr, V. Werner, W. Witt, D. Wölk, K.O. Zell, P. Van Isacker, and V.Yu. Ponomarev
European Physical Journal A **53**: 175 (2017);
"A revised $B(E2; 2_1^+ \rightarrow 0_1^+)$ value in the semi-magic nucleus ^{210}Po "
11. T. Konstantinopoulos, P. Petkov, A. Goasduff, T. Arici, A. Astier, L. Atanasova, M. Axiotis, D. Bonatsos, P. Detistov, A. Dewald, M. J. Eller, V. Foteinou, A. Gargano, G. Georgiev, K. Gladnishki, A. Gottardo, S. Harissopulos, H. Hess, S. Kaim, **D. Kocheva**, A. Kusoglu, A. Lagoyannis, J. Ljungvall, R. Lutter, I. Matea, B. Melon, T. J. Mertzimekis, A. Nannini, C. M. Petrache, A. Petrovici, G. Provatas, P. Reiter, M. Rocchini, S. Rocchia, M. Seidlitz, B. Siebeck, D. Suzuki, N. Warr, H. De Witte, and T. Zerrouki
Physical Review C **95**, 014309 (2017);
"Lifetime measurements in ^{100}Ru "
12. D. Ralet, G. Georgiev, A. E. Stuchbery, E. Clément, A. Lemasson, C. Michelagnoli, M. Rejmund, L. Atanasova, D. L. Balabanski, G. Bocchi, R. Carroll, A. Dewald, J. Dudouet, B. Fornal, G. de France, S. Franchoo, C. Fransen, C. Müller-Gatermann, A. Goasduff, A. Gadea, B. Jacquot, P. R. John, **D. Kocheva**, T. Konstantinopoulos, A. Korichi, A. Kusoglu, S. M. Lenzi, S. Leoni, J. Ljungvall, R. Lozeva, A. Maj, A. Navin, R. Perez, N. Pietralla, C. Shand, O. Stezowski and D. Yordanov
D. Ralet, . . . , D. Kocheva *et. al.*, Physica Scripta **92**, 054004 (2017);
"Toward lifetime and g factor measurements of short-lived states in the vicinity of ^{208}Pb "
13. **D. Kocheva**, G. Rainovski, J. Jolie, N. Pietralla, C. Stahl, P. Petkov, A. Blazhev, A. Hennig, A. Astier, Th. Braunroth, M. L. Cortés, A. Dewald, M. Djongolov, C. Fransen, K. Gladnishki, V. Karayonchev, J. Litzinger, C. Müller-Gatermann, M. Scheck, Ph. Scholz, R. Stegmann, P. Thöle, V. Werner, W. Witt, D. Wölk, and P. Van Isacker
Physical Review C **93**, 011303(R) (2016);
"Low-lying isovector 2^+ valence-shell excitations of ^{212}Po "

Publications in journals with SJR

1. **D. Kocheva**, A. Yaneva, D. Kalaydjieva, G. Rainovski, J. Jolie, N. Pietralla, M. Beckers, A. Blazhev, L. Bussmann, M. Cappellazzo, A. Dewald, F. Diel, M. Djongolov, F. Dunkel, A. Esmaylzadeh, B. Falk, C. Fransen, J. Garbe, L. Gerhard, R.-B. Gerst, K. A. Gladnishki, A. Goldkuhle, G. Hackenberg, C. Henrich, I. Homm, K. Ide, V. Karayonchev, R. Kern, J. Kleeman, L. Knafla, L. Kornwebel, Th. Kröll, M. Ley, C. Müller-Gatermann, M. Scheck, T. Schmidt, P. Spagnoletti, M. Stoyanova, V. Werner
Journal of Physics: Conference Series **1555**, 012020 (2020);
Lifetime measurements of the low-lying excited states of ^{208}Po
2. M. Stoyanova, V. Karayonchev, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, A. Dewald, M. Djongolov, A. Esmaylzadeh, C. Fransen, J. Garbe, L. Gerhard, K. A. Gladnishki,

- K. Ide, P. R. John, R. Kern, J. Kleemann, **D. Kocheva**, Th. Kröll, C. Müller-Gatermann, J.-M. Régis, P. Spagnoletti, V. Werner and A. Yaneva
Journal of Physics: Conference Series **1555**, 012019 (2020);
Evolution of the structure of the 4_1^+ states in Po isotopes
3. R. Kern, R. Zidarova, N. Pietralla, G. Rainovski, L. P. Gaffney, A. Blazhev, A. Boukhari, J. Cederkäll, J. G. Cubiss, M. Djongolov, C. Fransen, K. Gladnishki, E. Giannopoulos, H. Hess, J. Jolie, V. Karayonchev, L. Kaya, J. M. Keatings, **D. Kocheva**, T. Kröll, O. Möller, G. G. O'Neill, J. Pakarinen, P. Reiter, D. Rosiak, M. Scheck, J. Snall, P. Söderström, P. Spagnoletti, R. Stegmann, M. Stoyanova, S. Thiel, A. Vogt, N. Warr, A. Welker, V. Werner, J. Wiederhold, H. De Witte
Journal of Physics: Conference Series **1555**, 012027 (2020);
Coulomb Excitation of Proton-rich $N = 80$ Isotones at HIE-ISOLDE
 4. M. Stoyanova, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, M. Djongolov, A. Esmaylzadeh, L. Gerhard, K. Gladnishki, V. Karayonchev, J. Keatings, R. Kern, **D. Kocheva**, T. Kröll, K. Mashtakov, O. Möller, J. M. Régis, M. Scheck, K. Schomacker, J. Sinclair, C. Sürder, V. Werner, and J. Wiederhold
EPJ Web of Conferences **194**, 03002 (2018);
A study on the transition between seniority-type and collective excitations in ^{204}Po and ^{206}Po
 5. R. Kern, R. Stegmann, N. Pietralla, G. Rainovski, L. P. Gaffney, A. Blazhev, A. Boukhari, J. Cederkäll, J. Cubiss, M. Djongolov, C. Fransen, K. Gladnishki, E. Giannopoulos, H. Hess, J. Jolie, V. Karayonchev, L. Kaya, J. Keatings, **D. Kocheva**, T. Kröll, O. Möller, G. O'Neill, J. Pakarinen, P. Reiter, D. Rosiak, M. Scheck, J. Snall, P. Söderström, P. Spagnoletti, M. Stoyanova, S. Thiel, A. Vogt, N. Warr, A. Welker, V. Werner, J. Wiederhold, H. De Witte, and R. Zidarova
EPJ Web of Conferences **194**, 03003 (2018);
Search for Isovector Valence-Shell Excitations in ^{140}Nd and ^{142}Sm via Coulomb excitation reactions of radioactive ion beams
 6. **D. Kocheva**, G. Rainovski, J. Jolie, N. Pietralla, A. Blazhev, A. Astier, R. Altenkirch, M. Bast, M. Beckers, S. Ansari, Th. Braunroth, M. Cappellazzo, M.L. Cortés, A. Dewald, F. Diel, M. Djongolov, C. Fransen, K. Gladnishki, A. Goldkuhle, A. Hennig, V. Karayonchev, J.M. Keatings, E. Kluge, Th. Kröll, J. Litzinger, K. Moschner, C. Müller-Gatermann, P. Petkov, M. Rudigier, M. Scheck, P. Spagnoletti, Ph. Scholz, T. Schmidt, M. Spieker, C. Stahl, R. Stegmann, A. Stolz, A. Vogt, M. Stoyanova, P. Thöle, N. Warr, V. Werner, W. Witt, D. Wölk, J.C. Zamora, K.O. Zell, P. Van Isacker, V.Yu. Ponomarev
Journal of Physics: Conference Series **1023**, 012019 (2018);
"Low collectivity of the first 2^+ states of $^{210,212}\text{Po}$ "
 7. **D. Kocheva**, G. Rainovski, J. Jolie, N. Pietralla, C. Stahl, P. Petkov, A. Blazhev, A. Hennig, A. Astier, Th. Braunroth, L. Cortes, A. Dewald, M. Djongolov, C. Fransen, K. Gladnishki, V. Karayonchev, J. Litzinger, C. Müller-Gatermann, M. Scheck, Ph. Scholz, C. Schramm, P. Tölle, V. Werner, W. Witt, D. Wölk and P. Van Isacker
Journal of Physics: Conference Series **724**, 012023 (2016);
"Search for mixed-symmetry states in ^{212}Po "

8. **D. Kocheva**, R. Stegmann, G. Rainovski, J. Jolie, N. Pietralla, C. Stahl, P. Petkov, A. Blazhev, A. Hennig, C. Bauer, Th. Braunroth, M.P. Carpenter, L. Cortes, A. Dewald, M. Djongolov, C. Fransen, K. Gladnishki, R.V. F. Janssens, V. Karayonchev, M. Lettmann, C.J. Lister, J. Litzinger, Th. Möller, C. Müller-Gatermann, M. Scheck, Ph. Scholz, C. Schramm, P. Thöle, V. Werner, D. Wölk, S. Zhu, and P. Van Isacker
EPJ Web of Conferences **107**, 03004 (2016);
"Search for mixed-symmetry states of nuclei in the vicinity of the double-magic nucleus ^{208}Pb "