

Top 40 publications citation-ordered
(Total count all papers: 5209, Web of Science)

October 14, 2024

1. C. Yeretzian, K. Hansen, F. Diederich and R.L. Whetten:
Coalescence reactions of fullerenes.
Nature **359** (1992) 44.
253 citations
2. H. Nishioka, K. Hansen and B.R. Mottelson:
Supershells in metal clusters.
Phys. Rev. B **42** (1990) 9377.
234 citations
3. J. Pedersen, S. Bjørnholm, J. Borggreen, K. Hansen, T.P. Martin and H.D. Rasmussen:
Observation of quantum supershells in clusters of sodium atoms.
Nature **353** (1991) 733.
208 citations
4. J.U. Andersen, E. Bonderup and K. Hansen:
On the concept of temperature for a small isolated system.
J. Chem. Phys. **114** (2001) 6518.
174 citations
5. J.U. Andersen, E. Bonderup and K. Hansen:
Thermionic emission from clusters.
J. Phys. B **35** (2002) R1-R30.
165 citations
6. E.E.B. Campbell, K. Hansen, K. Hoffmann, G. Korn, M. Tchaplyguine, M. Wittmann, I.V. Hertel:
From Above Threshold Ionization to Statistical Electron Emission: The Laser Pulse Duration Dependence of C₆₀ Photoelectron Spectra.
Phys. Rev. Lett. **84** (2000) 2128.
152 citations
7. K. Hansen and O. Echt:
Thermionic Emission and Fragmentation of C₆₀.
Phys. Rev. Lett. **78** (1997) 2337.
124 citations
8. H.T. Schmidt, R. D. Thomas, M. Gatchell, S. Rosén, P. Reinhard, P. Löfgren, L. Brännholm, M. Blom, M. Björkhage, E. Bäckström, J. D. Alexander, S. Leontine, D. Hanstorp, H. Zettergren, L. Liljeby, A. Källberg, A. Simonsson, F. Hellberg, S. Mannervik, M. Larsson, W.D. Geppert, K.G. Rensfelt, H. Danared, A. Paál, M. Masuda, P. Halldéen, G. Andler, M.H. Stockett, T. Chen, G. Källersjö, J. Weimer, K. Hansen, H. Hartman, and H. Cederquist:
First storage of ion beams in the Double Electrostatic Ion-Ring Experiment - DESIREE
Rev. Sci. Instrum. **84** (2013) 055115
120 citations
9. K. Hansen, J.U. Andersen, P. Hvelplund, S.P. Möller, U.V. Pedersen and V.V. Petrunin:
Observation of 1/t decay law for hot clusters and molecules in a storage ring.
Phys. Rev. Lett. **87** (2001) 123401.
104 citations
10. S. Bjørnholm, J. Borggreen, O. Echt, K. Hansen, J. Pedersen, and H.D. Rasmussen:
Mean-field quantization of several hundred electrons in sodium metal clusters.
Phys. Rev. Lett. **65** (1990) 1627.
103 citations

11. K. Hansen and E.E.B. Campbell:
Radiative Cooling of Fullerenes.
J. Chem. Phys. **104** (1996) 5012.
94 citations
12. T.P. Martin, S. Bjørnholm, J. Borggreen, C. Bréchignac, Ph. Cahuzac, K. Hansen and J. Pedersen:
Electronic shell structure of laser-warmed Na-clusters.
Chem. Phys. Lett. **186** (1991) 53.
88 citations
13. M.J. Rosker, H.O. Marcy, T.Y. Chang, J.T. Khouri, K. Hansen and R.L. Whetten:
Time-resolved degenerate four-wave mixing in thin films of C₆₀ and C₇₀ using femtosecond optical pulses.
Chem. Phys. Lett. **196** (1992) 427.
80 citations
14. K. Hansen and U. Närer:
Evaporation and Cluster Abundance Spectra.
Phys. Rev. A **60** (1999) 1240.
79 citations
15. J.U. Andersen, C. Gottrup, K. Hansen, P. Hvelplund and M.O. Larsson:
Radiative cooling of fullerene anions in a storage ring.
Eur. Phys. J. D **17** (2001) 189.
75 citations
16. C. Leidlmaier, Y. Wang, P. Bartl, H. Schöbel, S. Denifl, M. Probst, M. Alcamí, F. Martín, H. Zettergren, K. Hansen, O. Echt, P. Scheier:
Structures, energetics and dynamics of helium adsorbed on isolated fullerene ions
Phys. Rev. Lett. **108** (2012) 076101
74 citations
17. K. Hansen:
Statistical Physics of Nanoparticles in the Gas Phase
Springer, Dordrecht, 2013
ISBN 978-94-007-5838-4 (print), 978-94-007-5839-1 (electronic)
<http://dx.doi.org/10.1007/978-94-007-5839-1>
Electronic version accessed 13 k times (Springer 2024-09-17)
65 citations (incl. variations)
19. G. Ito, T. Furukawa, H. Tanuma, J. Matsumoto, H. Shiromaru, T. Majima, M. Goto, T. Azuma, and K. Hansen:
Cooling dynamics of photoexcited C₆⁻ and C₆H⁻
Phys. Rev. Lett. **112** (2014) 183001
62 citations
19. K. Hansen, K. Hoffmann and E.E.B. Campbell:
Thermal electron emission from the hot electronic subsystem of vibrationally cold C₆₀.
J. Chem. Phys. **119** (2003) 2513.
62 citations
20. C. Yeretzian, K. Hansen and R.L. Whetten:
Rates of electron emission from negatively charged, impact-heated fullerenes.
Science **260** (1993) 652.
61 citations

21. S. Tomita, J.U. Andersen, K. Hansen, and P. Hvelplund:
 Stability of buckminsterfullerene C₆₀.
Chem. Phys. Lett. **382** (2003) 120-125.
57 citations
22. S. Podenok, M. Sveningsson, K. Hansen, and E.E.B. Campbell:
 Electric field enhancement factors around a metallic, end-capped cylinder
Nano **1** (2006) 87
56 citations
23. C. Walther, G. Dietrich, W. Dostal, K. Hansen, S. Krückeberg, K. Lützenkirchen and L. Schweikhard:
 Radiative Cooling of a Small Metal Cluster: The Case of V₁₃⁺.
Phys. Rev. Lett. **83** (1999) 3816.
56 citations
24. M. Brack, O. Genzken and K. Hansen:
 Thermal properties of the valence electrons in alkali metal clusters.
Z. Phys. D **21** (1991) 65.
56 citations
25. K. Hansen and E.E.B. Campbell:
 Thermal Radiation from Small Particles.
Phys. Rev. E **58** (1998) 5477.
55 citations
26. S. Bjørnholm, J. Borggreen, O. Echt, K. Hansen, J. Pedersen and H.D. Rasmussen:
 The influence of shells, electron thermodynamics, and evaporation on the abundance spectra of large sodium clusters.
Z. Phys. D **19** (1991) 47.
55 citations
27. M. Kjellberg, O. Johansson, F. Jonsson, A.V. Bulgakov, C. Bordas, E.E.B. Campbell, and K. Hansen:
 Momentum-map-imaging photoelectron spectroscopy of fullerenes with femtosecond laser pulses
Phys. Rev. A **81** (2010) 023202
52 citations
28. K. Hansen:
 Statistical Emission Processes of Clusters.
Philos. Mag. B **79** (1999) 1413.
51 citations
29. C. Yeretzian, K. Hansen, M.M. Alvarez, K.S. Min, E.G. Gillan, K. Holczer, R.B. Kaner and R.L. Whetten:
 Collisional probes and possible structures of La₂C₈₀.
Chem. Phys. Lett. **196** (1992) 337.
50 citations
30. M. Sveningsson, K. Hansen, K. Svensson, E. Olsson, and E.E.B. Campbell:
 Quantifying temperature-enhanced electron field emission from individual carbon nanotubes
Phys. Rev. B **72** (2005) 085429
49 citations
31. M. Vogel, K. Hansen, A. Herlert and L. Schweikhard:
 Model-free determination of dissociation energies in polyatomic systems
Phys. Rev. Lett. **87** (2001) 013401
49 citations

32. Giovanni De Ninno, Jonas Wätzel, Primož Rebernik Ribič, Enrico Allaria, Marcello Coreno, Miltcho B. Danailov, Christian David, Alexander Demidovich, Michele Di Fraia, Luca Giannessi, Klavs Hansen, Špela Krušić, Michele Manfredda, Michael Meyer, Andrej Mihelič, Najmeh Mirian, Oksana Plekan, Barbara Ressel, Benedikt Rösner, Alberto Simoncig, Simone Spampinati, Matija Stupar, Matjaž Žitnik, Marco Zangrando, Carlo Callegari, Jamal Berakdar:
Photoelectric effect with a twist
Nature Photonics **14** (2020) 554-558
48 citations
33. K. Hansen, P. Andersson and E. Uggerud:
Activation energies for evaporation from protonated and deprotonated water clusters from mass spectra
J. Chem. Phys. **131** (2009) 124303
48 citations
36. K. Hansen:
Statistical Physics of Nanoparticles in the Gas Phase
Springer, Dordrecht (2018)
(2nd edition)
ISBN 978-3-319-90061-2 (print), 978-3-319-90062-9 (eBook)
<https://doi.org/10.1007/978-3-319-90062-9>
Electronic version accessed 9172 times (Springer 2024-09-17)
47 citations
35. S. Tomita, J.U. Andersen, H. Cederquist, B. Concina, O. Echt, J.S. Forster, K. Hansen, B.A. Huber, P. Hvelplund, J. Jensen, B. Liu, B. Manil, L. Maunoury, S. Brøndsted Nielsen, J. Rangama, H.T. Schmidt, H. Zettergren:
Lifetimes of C_{60}^{2-} and C_{70}^{2-} dianions in a storage ring
J. Chem. Phys. **124** (2006) 024310
47 citations
36. Yuta Ebara, Takeshi Furukawa, Jun Matsumoto, Hajime Tanuma, Toshiyuki Azuma, Haruo Shiromaru, and Klavs Hansen:
Detection of Recurrent Fluorescence Photons
Phys. Rev. Lett. **117** (2016) 133004
44 citations
37. F. Rohmund, A.V. Glotov, K. Hansen and E.E.B. Campbell:
Experimental Studies of Fusion and Fragmentation of Fullerenes.
J. Phys. B **29** (1996) 5143.
44 citations
38. S.M. Reimann, M. Brack and K. Hansen:
Modified Nilsson model for large sodium clusters.
Z. Phys. D **28** (1993) 235.
44 citations
39. M. Vogel, K. Hansen, A. Herlert and L. Schweikhard:
Decay pathways of small gold clusters - the competition between monomer and dimer evaporation
Eur. Phys. J. D **16** (2001) 73
41 citations
40. S. Tomita, J.U. Andersen, E. Bonderup, P. Hvelplund, Bo Liu, S.B. Nielsen, U.V. Pedersen, J. Rangama, K. Hansen, O. Echt:
Dynamic Jahn-Teller effects in isolated C_{60}^{-} studied by near-infrared spectroscopy in a storage ring
Phys. Rev. Lett. **94** (2005) 053002
40 citations