

The Britz Acoustic Inertial Confinement Fusion Bibliography

Abstracts of Scientific Journal Articles of Acoustic Inertial Confinement Fusion Including Sonoluminescence and Bubble Fusion

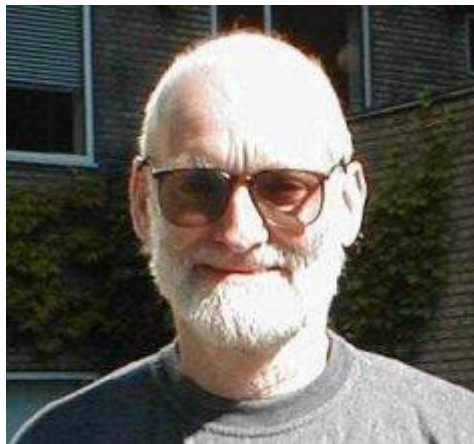
Primary Sort by Year; Secondary Sort by Last Name of First Author

Published by *New Energy Times* and Steven B. Krivit's *LENR Reference Site*

<https://newenergytimes.com/>

Dieter Britz, a professor of chemistry at the University of Aarhus in Denmark, kept track of papers published on the subjects of Acoustic Inertial Confinement Fusion including Sonoluminescence and Bubble Fusion.

For each paper, Britz created a database record and wrote an abstract, summarizing the paper from his perspective. His scope included English, German, Swedish, Italian, and to a limited extent, Russian-language journals.



Dieter Britz

Dieter Britz, Ph.D. (Sydney Univ. NSW 1967)
Dipl. Comp. Sci. (Newcastle Univ. NSW 1985)
Dr.scient. (Aarhus Univ. 2007)
From 1.1.2010, Emeritus (formally retired)

% No. of entries: 34

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@article{S.Arak2003,
  author    = {V.~H. Arakeri},
  title     = {Sonoluminescence and bubble fusion},
  journal   = {Curr. Sci.},
  volume    = {85},
  number    = {7},
  year      = {2003},
  pages     = {911--916},
  keywords  = {Review},
  annote    = {"Sonoluminescence (SL), the phenomenon of light emission from
nonlinear motion of a gas bubble, involves an extreme degree of energy
focusing. The conditions within the bubble during the last stages of the
nearly catastrophic implosion probably parallel the efforts aimed at
developing inertial confinement fusion. A limited review on the topic of SL
and its possible connection to bubble nuclear fusion is presented here. The
emphasis is on looking for a link between the various forms of SL obsd. and
the severity of bubble collapse or implosion. A simple energy anal. is also
presented to enable the search for an appropriate parameter space and an
exptl. technique for achieving energy densities required for triggering
fusion reactions within the bubble". (Direct quote from Chem. Abstr. AN
2003:940105)}
}
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@article{S.Barb1994,
  author    = {B.~P. Barber and C.~C. Wu and R. Lofstedt and P.~H. Roberts
and S. Putterman},
  title     = {Sensitivity of sonoluminescence to experimental parameters},
  journal   = {Phys. Rev. Lett.},
  volume    = {72},
  year      = {1994},
  pages     = {1380--1383},
  annote    = {"Light-scattering measurements have enabled the authors to det.
that the transition to sonoluminescence is characterized by a bifurcation in
the dynamics of a trapped pulsating bubble. These expts. also reveal that
in
the sonoluminescence (SL) state, changes in bubble radius of only 20\% are
assocd. with factors of 200 in the intensity of emitted light. This
sensitivity of SL suggests that it originates from the kind of singular
behavior that arises from the implosion of a shock wave. Theor.
extrapolations of this model to energy scales for fusion are discussed."
(CAN 120:256429)}
}
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@article{S.Belg2000,
  author    = {F. Belgiorno and S. Liberati and M. Visser and D.~W. Sciamma},
  title     = {Sonoluminescence: two-photon correlations as a test of
thermality},
  journal   = {Phys. Lett. A},
  volume    = {271},
  year      = {2000},
  pages     = {308--313},
  annote    = {This paper addresses the question of whether the light emitted
from a bubble under sonoluminescence conditions reflects, via its spectrum,
high temperatures or whether this is an artifact due to the Casimir effect.}
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This has been previously suggested (see S.Eber1996). Here the authors attempt to find criteria that might enable one to distinguish one cause from the other, by experiment.}

}

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@article{S.Delg2002,
  author    = {G.~A. Delgadino and F.~J. Bonetto and R.~T. {Lahey Jr}},
  title     = {The relationship between the method of acoustic excitation
              and the stability of single bubble sonoluminescence for
              various noble gases},
  journal   = {Chem. Eng. Commun.},
  volume    = {189},
  number    = {6},
  year      = {2002},
  pages     = {786--802},
  annote    = {When a gas bubble is properly excited it will oscillate and may
              undergo implosions during which the gas in the bubble can become so
              compressed that a plasma is formed, resulting in the emission of photons.
              That is, light pulses may occur during implosions. This phenomenon was
              known
              of for >60 yr and is called sonoluminescence. It is of great interest to
              scientists and engineers for high temp. chem. reactions, remediation of
              contaminated liqs. and, more recently, the possibility of thermonuclear
              fusion. Measurements using mixed frequency ultrasonic bubble excitation
              were
              performed for different dissolved noble gases at various temps. The
              transient radius of the bubble was measured using Mie scattering and
              sonoluminescence (i.e., photon) emission was detected using two
              photomultipliers, which were band pass filtered to be sensitive to different
              parts of the emission spectrum. The redn. in the ambient radius was
              identified as being directly related to bubble stability (i.e., the smaller
              the ambient radius, the less likely is the bubble to break up). In addn.,
              the apparent lower frequency between strong implosions (i.e., the longer
              time
              for interfacial perturbations to damp) is also important. Interestingly,
              while the intensity of the light emissions was directly related to the
              amplitude of the imposed excitation pressure, the corresponding av. gas
              temp. was unaffected. CAN 2002:589397)}}
}
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@article{S.Eber1996,
  author    = {C. Eberlein},
  title     = {Sonoluminescence as quantum vacuum radiation},
  journal   = {Physical Rev. Lett.},
  volume    = {76},
  year      = {1996},
  pages     = {3842--3845},
  annote    = {The author introduces the problems with the theories so far
              proposed to explain the phenomenon of ultrasound-induced periodic
              sonoluminescence, where flashes of apparent black-body radiation implying
              temperatures of some of tens of thousands Kelvin, are emitted. Her theory
              rests on a suggestion by Schwinger and the Unruh effect, being that a mirror
              (the bubble walls) uniformly accelerated in vacuum emits such radiation.
              This
              idea is quantified and leads to results consistent with observations. An
              experiment is finally suggested to test the theory: to check for x-rays in
              that part of the spectrum to which water is transparent; real black body
}
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radiation should produce some of this, while the Unruh effect forbids them. Another test involves anisotropic emission from elongated bubbles.}

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@article{S.Flan2005,
  author    = {D.~J. Flannigan and K.~S. Suslick},
  title     = {Plasma formation and temperature measurement during
              single-bubble cavitation},
  journal   = {Nature},
  volume    = {434},
  year      = {2005},
  pages     = {52--55},
  annote    = {Single-bubble sonoluminescence (SBSL) results from the extreme
              temperatures and pressures achieved during bubble compression; calculations
              have predicted the existence of a hot, optically opaque plasma core with
              consequent bremsstrahlung radiation. Recent controversial reports claim the
              observation of neutrons from deuterium-deuterium fusion during acoustic
              cavitation. However, there has been previously no strong experimental
              evidence for the existence of a plasma during single- or multi-bubble
              sonoluminescence. SBSL typically produces featureless emission spectra that
              reveal little about the intra-cavity physical conditions or chemical
              processes. Here we report observations of atomic (Ar) emission and
              extensive
              molecular (SO) and ionic (O2+) progressions in SBSL spectra from
              concentrated
              aqueous H2SO4 solutions. Both the Ar and SO emission permit spectroscopic
              temperature determinations, as accomplished for multi-bubble
              sonoluminescence
              with other emitters. The emissive excited states observed from both Ar and
              O2+ are inconsistent with any thermal process. The Ar excited states
              involved are extremely high in energy (>13 eV) and cannot be thermally
              populated at the measured Ar emission temperatures (4,000-15,000 K); the
              ionization energy of O2 is more than twice its bond dissociation energy, so
              O2+ likewise cannot be thermally produced. We therefore conclude that these
              emitting species must originate from collisions with high-energy electrons,
              ions or particles from a hot plasma core.}
}
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@article{S.Fuku1993,
  author    = {K. Fukushima},
  title     = {Is sono-fusion to be a possible mechanism for cold fusion?},
  journal   = {Frontiers Science Series},
  volume    = {4},
  year      = {1993},
  pages     = {609--612},
  annote    = {The phenomenon of sono-luminescence has recently appeared
              before the footlights. Recently, direct measurement of the temp. of a hot
              spot created in a liq. by applying a supersonic field was carried out and
              very large values, T aprx. 0.5 eV, were obtained. It seems therefore, to
              be an urgent problem to det. the upper bound for temps. and densities
              realizable in the hot spot, in connection with cold fusion. The authors
              calc. it by using the bubble dynamics thus far developed by many authors and
              they est. the fusion rate per bubble. (Direct quote from Chem. Abstr. CAN
              119:211893).}
}
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@article{S.Gyul2002,
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author      = {B. Gyula},
title       = {Bubble fusion: second part of a scientific tragicomedy},
journal     = {Termeszt Vilaga May},
year        = {2002},
pages       = {228--229},
note        = {In Hungarian},
annotate    = {Comment on SL fusion.}
}

@article{S.Haug1996,
author      = {A. Haug and H. H{\o}gaasen},
title       = {Sonoluminescence in heavy water},
journal     = {Phys. Scripta},
volume      = {54},
year        = {1996},
pages       = {197--199},
keywords    = {Experimental, sonoluminescence, neutrons, res-},
submitted   = {09/1995},
published   = {08/1996},
annotate    = {The authors repeated the sonoluminescence experiment,
succeeding
in achieving a stable luminescent bubble in the flask centre, as have
others.
This worked also in heavy water saturated with argon, and when deuterium was
injected. Some simple radiation detectors around the flask failed to show
signs of fusion taking place. They conclude that this is not a useful energy
source.}
}

@article{S.Levi2006,
author      = {M.~T. Levinsen},
title       = {Sonoluminescence},
journal     = {Gamma (Copenhagen, Denmark)},
volume      = {141},
year        = {2006},
pages       = {27--32},
annotate    = {"The mechanisms pertaining to Multi Bubble Sonoluminescence and
Single Bubble Sonoluminescence are discussed. Advances and new results for
the surprisingly strong light emission from sulfuric and phosphoric acids as
well as possible fusion reactions receive consideration". (Direct quote from
Chem. Abstr. AN 2006:373760)}
}

@article{S.Lohs2005,
author      = {D. Lohse},
title       = {Cavitation hots up},
journal     = {Nature},
volume      = {434},
year        = {2005},
pages       = {33--34},
annotate    = {Largely a comment on the paper by Flannigan and Suslick in the
same issue of the journal, Lohse remarks on the high temperatures that these
authors have shown to exist within collapsing bubbles. There is also some
historical stuff, going back to 1917.}
}
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```
@article{S.Maso1991,
  author    = {T.~J. Mason and J.~P. Lorimer},
  title     = {On the origin of sonoluminescence and sonochemistry.
              Comments. Particle fusion in an ultrasonic field
              - a cautionary note.},
  journal   = {Ultrasonics},
  volume    = {29},
  number    = {5},
  year      = {1991},
  pages     = {417.},
  annote    = {"A polemic related to the work of K. S. Suslick et al. (ibid.
              1990, 28, 280). Fused particles of Zn and Ni powders can be fused together
              before subjected to sonication". (Direct quote from Chem. Abstr.
              116:181684)}
}
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```
@article{S.Moss1996,
  author    = {W.~C. Moss and D.~B. Clarke and J.~W. White and D.~A. Young},
  title     = {Sonoluminescence and the prospects for table-top
              micro-thermonuclear fusion},
  journal   = {Phys. Lett. A},
  volume    = {211},
  year      = {1996},
  pages     = {69--74},
  annote    = {Hydrodynamic simulations of a collapsing bubble show that pure
              D2 cannot exhibit picosecond sonoluminescence, because of its large sound
              speed. The addn. of D2O vapor lowers the sound speed and produces calcd.
              results consistent with expts. A pressure spike added to the periodic
              driving amplitude creates temps. that may be sufficient to generate a very
              small no. of thermonuclear D-D fusion reactions in the bubble. CAN
              124:157641)}
}
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```
@article{S.Ohta2003a,
  author    = {T. Ohta},
  title     = {On the molecular kinetics of accoustic cavitation and the
              nuclear emission},
  journal   = {Int. J. Hydrogen Energy},
  volume    = {28},
  year      = {2003},
  pages     = {437--443},
  annote    = {The author goes through some mathematics and comes to a
              possible bubble temperature of  $10^9$  K or 100 keV, enough to cause
              fusion. This is without any heat loss; but the heating is very fast, and
              acetone has only 1/4 the heat conductance of water.}
}
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@article{S.Ohta2003b,
  author    = {T. Ohta},
  title     = {Criteria for nuclear emission by bubble implosion},
  journal   = {Int. J. Hydrogen Energy},
  volume    = {28},
  year      = {2003},
  pages     = {1011--1014},
  keywords  = {Theory},
  annote    = {Ohta theorises about SL fusion, considering bubble size, heat
              losses, and other factors. The conclusion is that bubble fusion is unlikely
}
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but perhaps not impossible.}
}

@article{S.Ohta2004,
  author    = {T. Ohta},
  title     = {Life cycle of cavitation bubble for the nuclear emission},
  journal   = {Int. J. Hydrogen Energy},
  volume    = {29},
  year      = {2004},
  pages     = {529--535},
  keywords  = {Theory},
  annote    = {More theory on SL fusion, exploring some parameters. The
temperature in a collapsing bubble could "easily" reach  $10^8$  K if only
losses were not as they are. As in previous studies by the same author, SL
fusion seems unlikely but must be studied further.}
}

@article{S.Prev1995,
  author    = {T.~V. Prevenslik},
  title     = {Ultrasound induced and laser enhanced cold fusion chemistry},
  journal   = {Nucl. Sci. Techniques},
  volume    = {6},
  year      = {1995},
  pages     = {198--203},
  keywords  = {Theory, ultrasound, res+},
  submitted = {02/1995},
  published = {11/1995},
  annote    = {The author first presents the standard theory of
sonoluminescence
(SL), which says that for fusion to result from the collapse of gas bubbles
under these conditions, the collapsing bubbles must be precisely spherical;
since they will not be, the standard theory rules out fusion. The author
then
develops his own theory, in which 10 eV ultraviolet is generated by SL, and
this in turn may stimulate fusion, if helped by visible and IR photons in
the
bubbles.}
}

@article{S.Prev1996,
  author    = {T.~V. Prevenslik},
  title     = {Sonoluminescence: an IRaser creating cold fusion neutrons?},
  journal   = {Nucl. Sci. Tech.},
  volume    = {7},
  year      = {1996},
  pages     = {157--160},
  keywords  = {Theory, sonoluminescence, res-},
  submitted = {04/1996},
  published = {08/1996},
  annote    = {Prevenslik goes through some theory of SL, to see whether
sufficiently high energies might be attained upon bubble collapse to cause
fusion. The IRaser theory predicts energies up to about 2 keV, lower than
the
10 keV needed for fusion; the author suggests however, that UV laser
enhancement applied externally might do the trick.}
}
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@article{S.Prev1997,
  author    = {T.~V. Prevenslik},
  title     = {Sonoluminescence: microwaves and cold fusion},
  journal   = {Nucl. Sci. Tech.},
  volume    = {8},
  year      = {1997},
  pages     = {94--97},
  keywords  = {Theory, sonofusion, microwaves, res+, no FPH/Jones ref.},
  submitted = {01/1997},
  published = {05/1997},
  annote    = {The author continues his theoretical work on sonoluminescence,
  which he believes may be accompanied by cold fusion. He states that
  microwaves may be generated and cause some cold fusion, though not
  much. However, high power pulsed microwaves aimed at the bubbles might
  increase the cold fusion rate. He suggests research using MW sources at 1.35
  GHz, pulse width of 1 ns and a rep rate of  $10^4$  Hz. }
}
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@article{S.Prev1998,
  author    = {T.~V. Prevenslik},
  title     = {Sonoluminescence: fusion at ambient temperature?},
  journal   = {Fusion Technol.},
  volume    = {34},
  year      = {1998},
  pages     = {128--136},
  keywords  = {Theory, suggestion, res+, no FPH/Jones ref.},
  submitted = {03/1996},
  published = {09/1998},
  annote    = {Prevenslik has previously written about SL, and carries the
  argument further here, developing his Planck theory to explain it. Multiple
  bubble SL (MBSL) produces pancake-shaped collapses which are much more
  energetic than SBSL, which collapse spherically. Some fusion events in D2O,
  at energies of up to and beyond 10 keV are not impossible, he concludes.}
}
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@article{S.Prev1999,
  author    = {T.~V. Prevenslik},
  title     = {Sonoluminescence: physics of fusion at ambient temperature
  in the Planck theory},
  journal   = {Fusion Technol.},
  volume    = {36},
  year      = {1999},
  pages     = {309--314},
  keywords  = {Theory, sonofusion, res0},
  annote    = {The author applies his Planck theory of sonoluminescence,
  arriving at rather high energy during bubble collapse - up to keV levels,
  and
  there might be tails at up to 10 keV, enough for some dd fusion to take
  place. He notes that there would be only microjoules of heat, but there
  should be measurable neutron fluxes. No reference to Eberlein (1996,
  Peripherals), who believes that the apparently high temperatures in the
  bubbles are an artifact due to accelerating bubble walls.}
}
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@article{S.Prev2000,
  author    = {T.~V. Prevenslik},
  title     = {On the possibility of a cavity QED cold fusion cell},
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journal   = {Indian J. Pure Appl. Phys.},
volume    = {38},
year      = {2000},
pages     = {155--157},
keywords  = {Theory, sonoluminescence, res+},
submitted = {11/1999},
published = {03/2000},
annotate  = {How cold dd fusion can be initiated is explained by the Planck
theory of sonoluminescence (SL), as previously outlined by the author.
The
energy derives from collapsing bubbles, and extends up to soft x-rays.
The
theory does require testing, however. Such tests are planned at the
Bhaba
site in Bombay.}
}

@article{S.Robel1996,
author    = {P. H. Roberts and C.~C. Wu},
title     = {Structure and stability of a spherical implosion},
journal   = {Phys. Lett. A},
volume    = {213},
year      = {1996},
pages     = {59--64},
annotate  = {Similarity solns. and stability for strong spherical implosions
are studied for both ideal and van der Waals gases. When the van der Waals
excluded vol. is sufficiently large, a new type of soln. is found and the
shock may be linearly stable. Implications for inertial confinement fusion
and sonoluminescence are discussed. CAN 124:325817)}
}

@article{S.Seif2002,
author    = {C.~F. Seife},
title     = {Nuclear fusion and storm in a beaker},
journal   = {Recherche},
volume    = {345},
year      = {2002},
pages     = {29--31},
note      = {In French},
annotate  = {A review on cold fusion with sonoluminescence. CAN 2002:595882}
}

@article{S.Seif1996,
author    = {W. Seifritz},
title     = {Ein neuer Weg zur Nutzbarmachung der Kernfusion?
(A new way of using nuclear fusion?)},
journal   = {Atomwirtschaft Atomtech.},
volume    = {41},
year      = {1996},
pages     = {729--730},
note      = {In German},
keywords  = {Theory, polemic, res-},
published = {11/1996},
annotate  = {The author responds to claims that the high temperatures
inferred from the light flashes given off in sonoluminescence (SL)
experiments might allow fusion. SL is not fully understood and is an
interesting phenomenon in its own right. He imagines the most favourable

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conditions: a D/T mixture in the bubble and sound focussing to raise the temperature from the observed 10^4 K to the 10^8 K (equivalent to several keV) required. Even under these conditions, there would not be sufficient heating up by the released alpha particles, to sustain the fusion reaction. So SL fusion is not possible and speculation in this direction can lead to SL itself to get the same bad reputation as F&P-type cold fusion.)

```
@article{S.Shap2002,
author   = {D. Shapira and M. Saltmarsh},
title    = {Nuclear fusion in collapsing bubbles-is it there? An attempt
           to repeat the observation of nuclear emissions from
           sonoluminescence},
journal  = {Phys. Rev. Lett.},
volume   = {89},
year     = {2002},
pages    = {104302/1--104302/4},
annotate = {We have repeated the expt. of Taleyarkhan et al. [Science 295,
1868 (2002)] in an attempt to detect the emission of neutrons from d-d
fusion
during bubble collapse in deuterated acetone. Using the same cavitation
app., a more sophisticated data acquisition system, and a larger
scintillator
detector, we find no evidence for 2.5-MeV neutron emission correlated with
sonoluminescence form collapsing bubbles. Any neutron emission that might
occur is at least 4 orders of magnitude too small to explain the tritium
prodn. reported in Taleyarkhan et al. as being due to d-d fusion. Proper
allowance for random coincidence rates in such expts. requires the
simultaneous measurement of the count rates in the individual detectors. AN
2002:641793}}
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@article{S.Suga1996,
author   = {V.~I. Sugakov},
title    = {Conditions for inducing, dynamics, and manifestation of
           atom acceleration in nonequilibrium crystals},
journal  = {Ukr. Fiz. Zh.},
volume   = {41},
year     = {1996},
pages    = {834--839},
note     = {In Ukrainian},
annotate = {The conditions are discussed of inducing, dynamics, and exptl.
manifestation of atom acceleration in a system characterized by a double-
well
potential along a crystal row. A numerical modeling of at. collisions in
such system is carried out. An anal. of the energy losses, which affect the
energy of accelerating atoms, is given. The possible existence is shown of
a
double-well potential in the vicinity of a dislocation core at high external
mech. loads; the dislocation motion is accompanied by a creation of
high-energy atoms (accelerons). Using the conception of accelerons,
different anomalous phenomena in crystals are explained: luminescence of
metals under strong mech. load, acoustoluminescence of semiconductors and
dielects., anomalous mass transfer under impulse loading of metals, and cold
nuclear fusion. CAN 126:109170}}
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@article{S.Tale2002,
  author    = {R.~P. Taleyarkan and C.~D. West and J.~S. Cho
              and R. T. {Lahey Jr.} and R. I. Nigmatulin and R.~C. Block},
  title     = {Evidence for nuclear emissions during acoustic cavitation},
  journal   = {Science},
  volume    = {295},
  year      = {2002},
  pages     = {1868--1873},
  annote    = {The team caused cavitation in deuterated acetone at 0 degrees
C,
and monitored for gamma and neutron emissions, suspecting that the high
compression upon caviation of the bubbles might cause fusion of deuterons,
beause of the high temperatures presumably reached upon bubble collapse (but
see the paper by Eberlein 1996). There was a noticable radioactive emission
rate with cavitationwith deuterated acetone but not with normal acetone used
as a control. So the conclusion is that fusion took place.}
}
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@article{S.Tale2004,
  author    = {R.~P. Taleyarkhan and J.~S. Cho and C.~D. West
              and R.~T. {Lahey Jr.} and R.~I. Nigmatulin and R.~C. Block},
  title     = {Additional evidence of nuclear emissions during
              acoustic cavitation.},
  journal   = {Phys. Rev. E},
  volume    = {69},
  year      = {2004},
  pages     = {036109/1--036109/11},
  annote    = {Time spectra of neutron and sonoluminescence emissions were
              measured in cavitation expts. with chilled deuterated acetone.}
```

Statistically

significant neutron and gamma ray emissions were measured with a calibrated liq.-scintillation detector, and sonoluminescence emissions were measured with a photomultiplier tube. The neutron and sonoluminescence emissions were found to be time correlated over the time of significant bubble cluster dynamics. The neutron emission energy was less than 2.5 MeV and the neutron emission rate was up to $\approx 4 \times 10^5$ n/s. Measurements of tritium prodn. were also performed and these data implied a neutron emission rate due to D-D fusion which agreed with what was measured. In contrast, control expts. using normal acetone did not result in statistically significant tritium activity, or neutron or gamma ray emissions. (Direct quote from Chem. Abstr. AN 2004:297619). But see Erratum, S.Tale2005.}

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@article{S.Tale2005,
  author    = {R.~P. Taleyarkhan and J.~S. Cho and C.~D. West
              and R.~T. {Lahey Jr.} and R.~I. Nigmatulin and R.~C. Block},
  title     = {Erratum: Additional evidence of nuclear emissions during
              acoustic cavitation, [Phys. Rev. E 69, 036109 (2004)]},
  journal   = {Phys. Rev. E},
  volume    = {71},
  year      = {2005},
  pages     = {019901/1.},
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  annote    = {The labeling was incorrect for the bottom portion of Figure
7(a),
  i.e., for normal acetone C3H6O. The PNG region should be cited as occurring
between 5 and 20 ms, not 10-25 ms. The measured neutron counts "before" the
first collapse were found to be essentially the same (with and without
cavitation) for both C3D6O and C3H6O. (Quote from Chem. Abstr. AN
2005:218184)}
}
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```
@article{S.Tale2008,
  author    = {R.~P. Taleyarkhan and J. Lapinskas and Y. Xu and J.~S. Cho
and R.~C. Block and R. T: {Lahey Jr.} and R.~I. Nigmatulin},
  title     = {Modeling, analysis and prediction of neutron emission spectra
from acoustic cavitation bubble fusion experiments},
  journal   = {Nucl. Eng. Design},
  volume    = {238},
  year      = {2008},
  pages     = {2779--2791},
  annote    = {Another paper by the Taleyarkhan group on SL fusion. There has
been some controversy about this work, culminating in charges of scientific
misconduct. Taleyarkhan was however cleared. Here, the team examines
theoretically how well the results of previous experiments fit with
expectation, for example the neutron measurements. There have been articles
critical of the Taleyarkhan team's work, but this paper concludes that these
other authors have neglected important aspects of bubble nuclear fusion and
associated phenomena.}
}
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@article{S.Thom2002,
  author    = {J.~L. Thomas and Y. Forterre and M. Fink},
  title     = {Boosting sonoluminescence with a high-intensity ultrasonic
pulse
focused on the bubble by an adaptive array},
  journal   = {Phys. Rev. Lett.},
  volume    = {88},
  year      = {2002},
  pages     = {074302/1--074302/4},
  annote    = {Single-bubble sonoluminescence was characterized by a great
concn. of energy during the collapse of a gas bubble, which gives photons
from low-frequency ultrasound. The narrow stability domain of
sonoluminescence has limited previous attempts to reinforce this inertial
confinement to generate photons of higher energy or to ignite a nuclear
fusion reaction. The authors present a new exptl. approach where an
ultrasonic pulse of high frequency is adaptively focused on the bubble
during
the collapse. Using an array of eight transmitters, a pressure pulse of 0.7
MPa doubles the flash intensity; this technique can easily be extended to
higher pressure. AN 2002:111044)}
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@article{S.Wang,
  author    = {L. Wang},
  title     = {Latest experiment on neutron detection and acoustic
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  journal   = {Wuli},
  volume    = {31},
  number    = {5},
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year      = {2002},
pages     = {272--274},
note      = {In Chinese},
annotate  = {A review. The latest expts. on neutron detection and acoustic
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fusion and "cold fusion" are considered. (Direct quotee from Chem. Abstr. AN
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@article{S.Ying2002,
author    = {C. Ying},
title     = {Recent developments in the study of acoustic cavitation
and related experiment on nuclear emission},
journal   = {Wuli},
volume    = {31},
number    = {8},
year      = {2002},
pages     = {490--495},
note      = {In Chinese},
annotate  = {A review with 10 refs. on the recent developments in the study
of acoustic cavitation and related expt. on nuclear emission including the
discovery, study and application of multiple-bubble acoustic cavitation
since
the 20's of the last century, esp. to the realization of a stable single
bubble and following exptl. and theor. studies of acoustic cavitation
including studies of the extreme conditions (high temp., high pressure and
high d.) inside a cavitation bubble and the mechanism of its
sonoluminescence, and expt. by Taleyarkhan R P et al. on nuclear emission by
acoustic cavitation. (Direct quote from Chem. Abstr. AN 2003:188513)}
}
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