LULI publications 2013-2018

ranked per category, then per year and per alphabetic order (1st author)

In order to identify the contributions of the different research teams, colored squares (bullets, when the publications are not refereed in the Web of Science, or diamond, for the invited talks) have been included above the publication ID, with the following code: ILP ■, PAPD ■, PARI ■ (since 2015), PHYHDEL ■, SPRINT ■ and TIPS ■; the products from the R&D projects - APOLLON ■, LUCIA ■ and XCAN ■ - are also identified as well as contributions of the technical support or operation groups ■.

Publications in refereed journals [PUB]

2013

■

[PUB1] G.G. Adonts and M.A. Arzakantsyan, *Nonstationary theory of polarized light pulse propagation through a four-level resonant medium with allowance for nonlinear complex refractive index of medium*, J. Contemporary Physics - Armen. Acad. Sci. 48, 210 (2013)

■

[PUB2] H. Ahmed, M.E. Dieckmann, L. Romagnani, D. Doria, G. Sarri, M. Cerchez, E. Ianni, I. Kourakis, A.L. Giesecke, M. Notley, R. Prasad, K. Quinn, O. Willi and M. Borghesi, *Time-Resolved Characterization of the Formation of a Collisionless Shock*, Phys. Rev. Lett. 110, 205001 (2013)

■■■

[PUB3] B. Albertazzi, J. Beard, A. Ciardi, T. Vinci, J. Albrecht, J. Billette, T. Burris-Mog, S.N. Chen, D. Da Silva, S. Dittrich, T. Herrmannsdorfer, B. Hirardin, F. Kroll, M. Nakatsutsumi, S. Nitsche, C. Riconda, L. Romagnani, H.-P. Schlenvoigt, S. Simond, E. Veuillot, T.E. Cowan, O. Portugall, H. Pépin and J. Fuchs, *Production of large volume, strongly magnetized laser-produced plasmas by use of pulsed external magnetic fields*, Rev. Sci. Instrum. 84, 043505 (2013)

■■

[PUB4] N. Amadou, E. Brambrink, A. Benuzzi-Mounaix, G. Huser, F. Guyot, S. Mazevet, G. Morard, T. de Resseguier, T. Vinci, K. Myanishi, N. Ozaki, R. Kodama, T. Boehly, O. Henry, D. Raffestin and M. Koenig, *Direct laser-driven ramp compression studies of iron: A first step toward the reproduction of planetary core conditions*, HEDP 9, 243 (2013)

■

[PUB5] P. Antici, L. Gremillet, T. Grismayer, P. Mora, P. Audebert, M. Borghesi, C.A. Cecchetti, A. Mancic and J. Fuchs, *Modeling target bulk heating resulting from ultra-intense short pulse laser irradiation of solid density targets*, Phys. Plasmas 20, 123116 (2013)

■

[PUB6] V.A. Astapenko, F.B. Rosmej, V.S. Lisitsa and X. Li, *Radiation Emission of Fast Electrons in Collisions with "Ion-Sphere" in Dense Plasmas*, Contrib. Plasma Physics 53, 507 (2013)

■

[PUB7] D. Batani, S. Paleari, T. Vinci, R. Benocci, K. Shigemori, Y. Hironaka, T. Kadono and A. Shiroshita, *Advances in the investigation of shock-iduced reflectivity of porous carbon*, Laser & Part. Beams 31, 457 (2013)

■

[PUB8] A. Bigongiari, M. Raynaud, C. Riconda and A. Héron, *Improved ion acceleration via laser surface plasmas waves excitation*, Phys. Plasmas 20, 052701 (2013)

■

[PUB9] C. Busschaert, E. Falize, B. Loupias, C. Michaut, A. Ravasio, A. Pelka, R. Yurchak and

M. Koenig, *POLAR project: a numerical study to optimize the target design*, New J. Phys. 15, 035020 (2013)

[PUB10] T. Ceccotti, V. Floquet, A. Sgattoni, A. Bigongiari, O. Klimo, M. Raynaud, C. Riconda, A. Héron, F. Baffigi, L. Labate, L.A. Gizzi, L. Vassura, J. Fuchs, M. Passoni, M. Kveton, F. Novotny, M. Possolt, J. Prokupek, J. Proska, J. Psikal, L. Stolcova, A. Velyhan, M. Bougeard, P. D'Oliveira, O. Tcherbakoff, F. Réau, P. Martin and A. Macchi, *Evidence of Resonant Surface-Wave Excitation in the Relativistic Regime through Measurements of Proton Acceleration from Grating Targets*, Phys. Rev. Lett. 111, 185001 (2013)

[PUB11] M. Cerchez, T. Toncian, A. L. Giesecke, C. Peth, M. Toncian, B. Albertazzi, J. Fuchs and O. Willi, *Generation of laser driven higher harmonics from grating targets*, Phys. Rev. Lett. 110, 065003 (2013)

[PUB12] Z. Chen, B. Holst, S.E. Kirkwood, V. Sametoglu, M. Reid, Y.Y. Tsui, V. Recoules and A. Ng, *Evolution of ac conductivity in nonequilibrium warm dense gold*, Phys. Rev. Lett. 110, 135001 (2013)

[PUB13] A. Ciardi, T. Vinci, J. Fuchs, B. Albertazzi, C. Riconda, H. Pépin, and O. Portugall, *Astrophysics of Magnetically Collimated Jets Generated from Laser-Produced Plasmas*, Phys. Rev. Lett. 110, 025002 (2013)

[PUB14] M.E. Dieckmann, H. Ahmed, G. Sarri, D. Doria, I. Kourakis, L. Romagnani, M. Pohl and M. Borghesi, *Parametric study of non-relativistic electrostatic shocks and the structure of their transition layer*, Phys. Plasmas 20, 042111 (2013)

[PUB15] M. Fatenejad, A.R. Bell, A. Benuzzi-Mounaix, R. Crowston, R.P. Drake, N. Flocke, G. Gregori, M. Koenig, C. Krauland, D. Lamb, D. Lee, J.-R. Marquès, J. Meinecke, F. Miniati, C.D. Murphy, H.-S. Park, A. Pelka, A. Ravasio, B. Remington, B. Reville, A. Scopatz, P. Tzeferacos, K. Weide, N. Woolsey, R. Toung and R. Yurchak, *Modeling HEDLA magnetic field generation experiments on laser facilities*, HEDP 9, 172 (2013)

[PUB16] G. Faussurier, C. Blancard and M. Gauthier, *Nuclear stopping power in warm and hot dense matter*, Phys. Plasmas 20, 012705 (2013)

[PUB17] V. Floquet, O. Klimo, J. Psikal, A. Velyhan, J. Limpouch, J. Proska, F. Novotny, L. Stolcova, A. Macchi, A. Sgattoni, L. Vassura, L. Labate, F. Baffigi, L.A. Gizzi, P. Martin and T. Ceccotti, *Micro-sphere layered targets efficiency in laser driven proton acceleration*, J. Appl. Phys. 114, 083305 (2013)

[PUB18] S. Fourmaux, S. Buffechoux, B. Albertazzi, D. Capelli, A. Levy, S. Gnedyuk, L. Lecherbourg, P. Lassonde, S. Payeur, P. Antici, H. Pépin, R.S. Marjoribanks, J. Fuchs and J.-C. Kieffer, *Investigation of laser-driven proton acceleration using ultra-short, ultra-intense laser pulses*, Phys. Plasmas 20, 013110 (2013)

[PUB19] E. Galtier, F.B. Rosmej, A. Calisti, B. Talin, C. Mossé, S. Ferri and V.S. Lisitsa, *Interference effects and Stark broadening in XUV intrashell transitions in aluminum under conditions of intense XUV free-electron-laser irradiation*, Phys. Rev. A 87, 033424 (2013)

[PUB20] M. Gauthier, S.N. Chen, A. Levy, P. Audebert, C. Blancard, T. Ceccotti, M. Cerchez, D. Doria, V. Floquet, E. Lamour, C. Peth, L. Romagnani, J.-P. Rozet, M. Scheinder, R. Shepherd, T. Toncian, D. Vernhet, O. Willi, M. Borghesi, G. Faussurier and J. Fuchs, *Charge equilibrium of a laser-generated carbon-ion beam in warm dense matter*, Phys. Rev. Lett. 110, 135003 (2013)

[PUB21] M. Gauthier, C. Blancard, S.N. Chen, B. Siberchicot, M. Torrent, G. Faussurier and J. Fuchs, *Stopping power modeling in warm and hot dense matter*, HEDP 9, 488 (2013)

[PUB22] F. Giambruno, A. Fréneaux and G. Chériaux, *Spectral mirror for ultra-short, high peak power, multi-PW Ti :sapphire lasers*, Appl. Phys. B 111, 161 (2013)

[PUB23] T. Gonçalvès-Novo, D. Albach, B. Vincent, M. Arzakantsyan and J.-C. Chanteloup, *14 J / 2 Hz Yb3+:YAG Diode Pumped Solid State Laser chain*, Opt. Express 21, 855 (2013)

[PUB24] C. Goyon, S. Depierreux, V. Yahia, G. Loisel, C. Baccou, C. Courvoisier, N.G. Borisenko, A. Orekhov, O. Rosmej and C. Labaune, *Experimental Approach to Interaction Physics Challenges of the Shock Ignition Scheme Using Short Pulse Lasers*, Phys. Rev. Lett. 111, 235006 (2013)

[PUB25] M.J. Grosskopf, R.P. Drake, C.C. Kurantz, E.M. Rutter, J.S. Ross, N.L. Kugland, C. Plechaty, B.A. Remington, A. Spitkovsky, L. Gargate, G. Gregori, A. Bell, C.D. Murphy, J. Meinecke, B. Reville, Y. Sakawa, Y. Kuramitsu, H. Takabe, D.H. Froula, G. Fiksel, F. Miniati, M. Koenig, A. Ravasio, E. Liang, W. Fu, N. Woolsey and H.-S. Park, *Simulation of laser-driven, ablated plasma flows in collisionless shock experiments on OMEGA and the NIF*, HEDP 9, 192 (2013)

[PUB26] S. Hansen, G.S.J. Armstrong, S. Bastiani-Ceccotti, C. Bowen, H.-K. Chung, J.P. Colgan, F. de Dortan, C.J. Fontes, F. Gilleron, J.-R. Marquès, R. Piron, O. Peyrusse, M. Poirier, Yu. Ralchenko, A. Sasaki, E. Stambulchik and F. Thais, *Testing the reliability of non-LTE spectroscopic models for complex ions*, HEDP 9, 523 (2013)

[PUB27] D.C. Hochhaus, B. Aurand, M. Basko, B. Ecker, T. Kühl, T. Ma, F. Rosmej, B. Zielbauer and P. Neumayer, *X-ray radiographic expansion measurements of isochorically heated thin wire targets*, Phys. Plasmas 20, 062703 (2013)

[PUB28] Y. Kuramitsu, Y. Sakawa, T. Morita, C.D. Gregory, J.N. Waugh, M. Koenig, N. Woolsey and H. Takabe, *Long time evolution of collisionless shocks in laser-produced counterstreaming plasmas*, HEDP 9, 222 (2013)

[PUB29] C. Labaune, C. Baccou, S. Depierreux, C. Goyon, G. Loisel, V. Yahia and J. Rafelski, *Fusion reactions initiated by laser-accelerated particle beams in a laser-produced plasma*, Nature Commun. 4, 2506 (2013)

[PUB30] L. Lancia, C. Fourment, J. Fuchs, J.-L. Feugeas, Ph. Nicolai, S. Bastiani-Ceccotti, M. Gauthier, S. Hulin, M. Nakatsutsumi, M. Rabec-Le-Gloahec, J.J. Santos and G. Schurtz, *Simultaneous measurement of self-generated magnetic fields and electron heat transport in dense plasma*, Laser & Part. Beams 31, 653 (2013)

[PUB31] P.M. Leguay, A. Levy, B. Chimier, F. Deneuville, D. Descamps, C. Fourment, C. Goyon, S. Hulin, S. Petit, O. Peyrusse, J.J. Santos, P. Combis, B. Holst, V. Recoules, P. Renaudin, L. Videau and F. Dorchies, *Ultrafast short-range disordering of femtosecond-laser-heated warm dense aluminum*, Phys. Rev. Lett. 111, 245004 (2013)

[PUB32] C.K. Li, D.D. Ryutov, S.X. Hu, M.J. Rosenberg, A.B. Zylstra, F.H. Seguin, J.A Frenje, D.T. Casey, M.G. Johnson, M.J.E. Manuel, H.G. Rinderknecht, R.D. Petrasso, P.A. Amendt, H.S. Park, B.A. Remington, S.C. Wilks, R. Betti, D.H. Froula, J.P. Knauer; D.D. Meyerhofer, R.P. Drake, C.C. Kuranz, R. Young and M. Koenig, *Structure and dynamics of collifing plasma jets*, Phys. Rev. Lett. 111, 235003 (2013)

[PUB33] T. Morita, Y. Sakawa, Y. Kuramitsu, S. Dono, H. Tanji, H. Aoki, T. Ide, K. Nishio, C.D. Gregory, J.N. Waugh, N. Woolsey, A. Dizière, M. Koenig, H. Ide, K. Tsubouchi and H. Takabe, *Interaction of high Mach-number shocks in laser-produced plasmas*, HEDP 9, 187 (2013)

[PUB34] M. Olazabal-Loume, P. Nicolaï, G. Riazuelo, M. Grech, J. Breil, S. Fujioka, A. Sunahara, N. Borisenko and V.T. Tikhonchuk, *Simulations of laser imprint reduction using underdense foams and its consequences on the hydrodynamic instability growth*, New J. Phys. 15, 085033 (2013)

[PUB35] S. Paleari, D. Batani, T. Vinci, R. Benocci, K. Shigemori, Y. Hironaka, T. Kadono, A. Shiroshita, P. Piseri, S. Bellucci, A. Mangione and A. Aliverdiev, *A new target design for laser shock-compression studies of carbon reflectivity in the megabar regime*, EPJ-D 67, 136 (2013)

[PUB36] L.P. Ramirez, D. Papadopoulos, M. Hanna, A. Pellegrina, F. Friebel, P. Georges and F. Druon, *Compact, simple, and robust cross polarized wave generation source of few-cycle, high-contrast pulses for seeding petawatt-class laser systems*, J.O.S.A. B 30, 2607 (2013)

[PUB37] A. Ricci, A. Jullien, J.-P. Rousseau, Y. Liu, A. Houard, P. Ramirez, D. Papadopoulos, A. Pellegrina, P. Georges, F. Druon, N. Forget and R. Lopez-Martens, *Energy-scalable temporal cleaning device for femtosecond laser pulses based on cross-polarized wave generation*, Rev. Sci. Instrum. 84, 043106 (2013)

[PUB38] C. Riconda, S. Weber, L. Lancia, J.-R. Marquès, G.A. Mourou and J. Fuchs, *Spectral characteristics of ultra-short laser pulses in plasma amplifiers*, Phys. Plasmas 20, 083115 (2013)

[PUB39] F.B. Rosmej, B. Deschaud, K. Bennadji, P. Indelicato and J.P. Marques, *Fine-structure electric-dipole matrix elements of He-like ions for x-ray line-shape calculations*, Phys. Rev. A 87, 022515 (2013)

[PUB40] J.J. Santos, D. Batani, S.D. Baton, F.N. Beg, T. Ceccotti, A. Debayle, F. Dorchies, J.-L. Feugeas, C. Fourment, l. Gremillet, J.J. Honrubia, S. Hulin, A. Morace, P. Nicolaï, F. Pérez, H. Sawada, H.-P. Schlenvoigt, V.T. Tikhonchuk, X.V.S.S. Eau, B. Vauzour and M. We, *Supra-thermal electron beam stopping power and guiding in dense plasmas*, J. Plasma Phys. 79, 429 (2013)

[PUB41] A. Scopatz, M. Fatenejad, N. Flocke, G. Gregori, M. Koenig, D.Q. Lamb, D. Lee, J. Meinecke, A. Ravasio, P. Tzeferacos, K. Weide and R. Yurchak, *FLASH hydrodynamic simulations of experiments to explore the generation of cosmological magnetic fields*, HEDP 9, 75 (2013)

[PUB42] R.H.H. Scott, F. Pérez, M.J.V. Streeter, E.L. Clark, J.R. Davies, H.-P. Schlenvoigt, J.J. Santos, S. Hulin, K.L. Lancaster, F. Dorchies, C. Fourment, B. Vauzour, A.A. Soloviev, S.D. Baton, S.J. Rose and P.A. Norreys, *Fast electron beam measurements from relativistically intense, frequency-doubled laser-solid interactions*, New J. Phys. 15, 093021 (2013)

[PUB43] R.H.H. Scott, E.L. Clark, F. Pérez, M.J.V. Streeter, J.R. Davies, H.-P. Schlenvoigt, J.J. Santos, S. Hulin, K.L. Lancaster, S.D. Baton, S.J. Rose and P.A. Norreys, *Measuring fast electron*

spectra and laser absorption in relativistic laser-solid interactions using differential bremsstrahlung photon detectors, Rev. Sci. Instrum. 84, 083505 (2013)

[PUB44] S. Turck-Chièze, D. Gilles, M. Le Pennec, T. Blenski, F. Thais, S. Bastiani-Ceccotti, C. Blancard, M. Busquet, T. Caillaud, J. Colgan, P. Cosse, F. Delahaye, J.-E. Ducret, G. Faussurier, C.J. Fontes, F. Gilleron, J. Guzik, J.W. Harris, D.P. Kilcrease, G. Loisel, N.H. Magee, J.-C. Pain, C. Reverdin, V. silvert, B. Villette and C.J. Zeippen, *Radiative properties of stellar envelopes: comparison of asteroseismic results to opacity calculations and measurements for iron and nickel*, HEDP 9, 473 (2013)

[PUB45] S. Weber, C. Riconda, L. Lancia, J.R. Marquès, G.A. Mourou and J. Fuchs, *Amplification of ultrashort laser pulses by Brillouin backscattering in plasmas*, Phys. Rev. Lett. 111, 055004 (2013)

2014

[PUB46] B. Albertazzi, A. Ciardi, M. Nakatsutsumi, T. Vinci, J. Beard, R. Bonito, J. Billette, M. Borghesi, Z. Burkley, S.N. Chen, T.E. Cowan, T. Herrmannsdoerfer, D.P. Higginson, F. Kroll, S.A. Pikuz, K. Naughton, L. Romagnani, C. Riconda, G. Revet, R. Riquier, H.-P. Schlenvoigt, I.Y. Skobelev, A.Y. Faenov, A. Soloviev, M. Huarte-Espinosa, A. Frank, O. Portugall, H. Pepin and J. Fuchs, *Laboratory formation of a scaled protostellar jet by coaligned poloidal magnetic field*, Science 346, 325 (2014)

[PUB47] A. Alejo, S. Kar, H. Ahmed, A.G. Krygier, D. Doria, R. Clarke, J. Fernandez, R.R. Freeman, J. Fuchs, A. Green, J.S. Green, D. Jung, A. Kleinschmidt, C.L.S. Lewis, J.T. Morrison, Z. Najmudin, H. Nakamura, G. Nersisyan, P. Norreys, M. Notley, M. Oliver, M. Roth, J.A. Ruiz, L. Vassura, M. Zepf and M. Borghesi, *Characterisation of deuterium spectra from laser driven multi-species sources by employing differentially filtered image plate detectors in Thomson spectrometers*, Rev. Sci. Instrum. 85, 093303 (2014)

[PUB48] M. Arzakantsyan and J.-C. Chanteloup, *Measuring Yb3+ spatial distribution in horizontally grown YAG crystals*, Opt. Mat. Express 4, 352 (2014)

[PUB49] D. Batani, L. Antonelli, S. Atzeni, J. Badziak, F. Baffigi, T. Chodukowski, F. Consoli, G. Cristoforetti, R. De Angelis, R. Dudzak, G. Folpini, L. Giuffrida, L.A. Gizzi, Z. Kalinowska, P. Koester, E. Krousky, M. Krus, L. Labate, T. Levato, Y. Maheut, G. Malka, D. Margarone, A. Marocchino, J. Nejdl, P. Nicolai, T. O'Dell, T. Pisarczyk, O. Renner, Y.J. Rhee, X. Ribeyre, M. Richetta, M. Rosinski, M. Sawicka, A. Schiavi, J. Skala, M. Smid, C. Spindloe, J. Ullschmied, A. Velyhan and T. Vinci, *Generation of high pressure shocks relevant to the shock-ignition intensity regime*, Phys. Plasmas 21, 032710 (2014)

[PUB50] D. Batani, T. Vinci and D. Bleiner, *Laser-ablation and induced nanoparticle synthesis*, Laser & Part. Beams 32, 1 (2014)

[PUB51] P.R. Bolton, M. Borghesi, C. Brenner, D.C. Carroll, C. De Martinis, A. Flacco, V. Floquet, J. Fuchs, P. Gallegos, D. Giove, J. S. Green, S. Green, B. Jones, D. Kirby, P. McKenna, D. Neely, F. Nuesslin, R. Prasad, S. Reinhardt, M. Roth, U. Schramm, G.G. Scott, S. Ter-Avetisyan, M. Tolley, G. Turchetti and J. J. Wilkens, *Instrumentation for diagnostics and control of laser-accelerated proton (ion) beams*, Physica Medica-European Journal of Medical Physics 30, 255-270 (2014)

[PUB52] A. Borot, D. Douillet, G. Iaquaniello, T. Lefrou, P. Audebert, J.-P. Geindre and R. Lopez-Martens, *High repetition rate plasma mirror device for attosecond science*, Rev. Sci. Instrum. 85, 013104 (2014)

[PUB53] G.L. Bourdet and C. Gouedard, *Theoretical analysis of an end-pumped Yb:YAG active mirror thin-disk amplifier with a longitudinal doping concentration gradient*, Appl. Opt. 53, 7556 (2014)

[PUB54] C.M. Brenner, A.P.L. Robinson, K. Markey, R.H.H. Scott, R.J. Gray, M. Rosinski, O. Deppert, J. Badziak, D. Batani, J.R. Davies, S.M. Hassan, K.L. Lancaster, K. Li, I.O. Musgrave, P.A. Norreys, J. Pasley, M. Roth, H.-P. Schlenvoigt, C. Spindloe, M. Tatarakis, T. Winstone, J. Wolowski, D. Wyatt, P. McKenna and D. Neely, *High energy conversion efficiency in laser-proton acceleration by controlling laser-energy deposition onto thin foil targets*, Appl. Phys. Lett. 104, 081123 (2014)

[PUB55] C.R.D. Brown, D.O. Gericke, M. Cammarata, B.I. Cho, T. Doeppner, K. Engelhorn, E. Foerster, C. Fortmann, D. Fritz, E. Galtier, S.H. Glenzer, M. Harmand, P. Heimann, N.L. Kugland, D.Q. Lamb, H.J. Lee, R.W. Lee, H. Lemke, M. Makita, A. Moinard, C.D. Murphy, B. Nagler, P. Neumayer, K.U. Plagemann, R. Redmer, D. Riley, F.B. Rosmej, P. Sperling, S. Toleikis, S.M. Vinko, J. Vorberger, S. White, T.G. White, K. Wuensch, U. Zastrau, D. Zhu, T. Tschentscher and G. Gregori, *Evidence for a glassy state in strongly driven carbon*, Sci. Reports 4, 5214 (2014)

[PUB56] A. Casner, L. Masse, B. Delorme, D. Martinez, G. Huser, D. Galmiche, S. Liberatore, I. Igumenshchev, M. Olazabal-Loume, P.H. Nicolai, J. Breil, D.T. Michel, D. Froula, W. Seka, G. Riazuelo, S. Fujioka, A. Sunahara, M. Grech, C. Chicanne, M. Theobald, N. Borisenko, A. Orekhov, V.T. Tikhonchuk, B. Remington, V.N. Goncharov and V.A. Smalyuk, *Progress in indirect and direct-drive planar experiments on hydrodynamic instabilities at the ablation front*, Phys. Plasmas 21, 122702 (2014)

[PUB57] J.-C. Chanteloup, M. Arzakantsyan and S. Marrazzo, *Defining optimal gradient doped Yb3+:YAG disk for room and cryogenic temperature operations*, HPLSE 2, e35 (2014)

[PUB58] S.N. Chen, M. Gauthier, D.P. Higginson, S. Dorard, F. Mangia, R. Riquier, S. Atzeni, J.-R. Marquès and J. Fuchs, *Monochromatic short pulse laser produced ion beam using a compact passive magnetic device*, Rev. Sci. Instrum. 85, 043504 (2014)

[PUB59] S.N. Chen, A.P.L. Robinson, P. Antici, E. Brambrink, E. d'Humieres, S. Gaillard, T. Grismayer, A. Mancic, P. Mora, L. Romagnani, P. Audebert, H. Pepin and J. Fuchs, *Passive tailoring of laser-accelerated ion beam cut-off energy by using double foil assembly*, Phys. Plasmas 21, 023119 (2014)

[PUB60] E. Dalimier and E. Oks, *Analytical theory of charge-exchange-caused dips in spectral lines of He-like ions from laser-produced plasmas*, J. Phys. B 47, 105001 (2014)

[PUB61] E. Dalimier, E. Oks and O. Renner, *Review of Langmuir-Wave-Caused Dips and Charge-Exchange-Caused Dips in Spectral Lines from Plasmas and their Applications*, Atoms 2, 178 (2014)

[PUB62] A. Denoeud, A. Benuzzi-Mounaix, A. Ravasio, F. Dorchies, P.-M. Leguay, J. Gaudin, F. Guyot, E. Brambrink, M. Koenig, S. Le Pape and S. Mazevet, *Metallization of Warm Dense SiO2 Studied by XANES Spectroscopy*, Phys. Rev. Lett. 113, 116404 (2014)

[PUB63] S. Depierreux, V. Yahia, C. Goyon, G. Loisel, P.-E. Masson-Laborde, N. Borisenko, A. Orekhov, O. Rosmej, T. Rienecker and C. Labaune, *Laser light triggers increased Raman amplification in the regime of nonlinear Landau damping*, Nature Commun. 5, 4158 (2014)

[PUB64] B. Deschaud, O. Peyrusse and F.B. Rosmej, *Generalized atomic processes for interaction of intense femtosecond XUV- and X-ray radiation with solids*, EPL 108, 53001 (2014)

[PUB65] C. Evangelatos, G. Tsaknakis, P. Bakopoulos, D. Papadopoulos, G. Avdikos, A. Papayannis and G. Tzeremes, *Actively Q-Switched Multisegmented Nd:YAG Laser Pumped at 885 nm for Remote Sensing*, IEEE PTL 26, 1890 (2014)

[PUB66] A. Frank, J. Fuchs, L. Lancia, G. Lehmann, J.-R. Marquès, G. Mourou, C. Riconda, K.H. Spatschek, T. Toncian, L. Vassura and S. Weber, *Amplification of ultra-short light pulses by ion collective modes in plasmas*, EPJ-ST 223, 1153 (2014)

[PUB67] F. Friebel, A. Pellegrina, D.N. Papadopoulos, P. Camy, J.-L. Doualan, R. Moncorge, P. Georges and F. Druon, *Diode-pumped Yb:CaF multipass amplifier producing 50 mJ with dynamic analysis for high repetition rate operation*, Appl. Phys. B 117, 597(2014)

[PUB68] J. Fuchs, A.A. Gonoskov, M. Nakatsutsumi, W. Nazarov, F. Quere, A.M. Sergeev and X.Q. Yan, *Plasma devices for focusing extreme light pulses*, EPJ-ST 223, 1169 (2014)

[PUB69] J. Gaudin, C. Fourment, B.I. Cho, K. Engelhorn, E. Galtier, M. Harmand, P.-M. Leguay, H.J. Lee, B. Nagler, M. Nakatsutsumi, C. Ozkan, M. Stoermer, S. Toleikis, T. Tschentscher, P.A. Heimann and F. Dorchies, *Towards simultaneous measurements of electronic and structural properties in ultra-fast x-ray free electron laser absorption spectroscopy experiments*, Sci. Reports 4, 4724 (2014)

[PUB70] M. Gauthier, A. Levy, E. d'Humieres, M. Glesser, B. Albertazzi, C. Beaucourt, J. Breil, S.N. Chen, V. Dervieux, J.-L. Feugeas, P. Nicolai, V. Tikhonchuk, H. Pepin, P. Antici and J. Fuchs, *Investigation of longitudinal proton acceleration in exploded targets irradiated by intense short-pulse laser*, Phys. Plasmas 21, 013102 (2014)

[PUB71] C.D. Gregory, A. Diziere, H. Aoki, H. Tanji, T. Ide, E. Falize, B. Loupias, C. Michaut, T. Morita, S.A. Pikuz, A. Ravasio, Y. Kuramitsu, Y. Sakawa, H. Takabe, N.C. Woolsey and M. Koenig, *Experiments to investigate the effects of radiative cooling on plasma jet collimation*, HEDP 11, 12 (2014)

[PUB72] F. Guichard, M. Hanna, Y. Zaouter, D.N. Papadopoulos, F. Druon and P. Georges, *Analysis of Limitations in Divided-Pulse Nonlinear Compression and Amplification*, IEEE J. ST-QE 20, 7600405 (2014)

[PUB73] B. Holst, V. Recoules, S. Mazevet, M. Torrent, A. Ng, Z. Chen, S.E. Kirkwood, V. Sametoglu, M. Reid and Y. Y. Tsui, *Ab initio model of optical properties of two-temperature warm dense matter*, Phys. Rev. B 90, 035121 (2014)

[PUB74] T. Iwawaki, H. Habara, S. Baton, K. Morita, J. Fuchs, S. Chen, M. Nakatsutsumi, C. Rousseaux, F. Filippi, W. Nazarov and K.A. Tanaka, *Collimated fast electron beam generation in critical density plasma*, Phys. Plasmas 21, 113103 (2014)

[PUB75] S. Laffite, S.D. Baton, P. Combis, J. Clerouin, M. Koenig, V. Recoules, C. Rousseaux and L. Videau, *Velocity Interferometer blanking due to preheating in a double pulse planar experiment*, Phys. Plasmas 21, 082705 (2014)

[PUB76] L. Lancia, B. Albertazzi, C. Boniface, A. Grisollet, R. Riquier, F. Chaland, K.C. Le Thanh, P. Mellor, P. Antici, S. Buffechoux, S.N. Chen, D. Doria, M. Nakatsutsumi, C. Peth, M. Swantusch, M. Stardubtsev, L. Palumbo, M. Borghesi, O. Willi, H. Pepin and J. Fuchs, *Topology of MegaGauss Magnetic Fields and of Heat-Carrying Electrons Produced in a High-Power Laser-Solid Interaction*, Phys. Rev. Lett. 113, 235001 (2014)

[PUB77] T. Lefevre, A. Escarguel, R. Stamm, L. Godbert-Mouret and F.B. Rosmej, *Investigation of particle diffusion and suprathermal electrons in a magnetized helium plasma column*, Phys. Plasmas 21, 023502 (2014)

[PUB78] P.-E. Masson-Laborde, S. Hueller, D. Pesme, C. Labaune, S. Depierreux, P. Loiseau and H. Bandulet, *Stimulated Brillouin scattering reduction induced by self-focusing for a single laser speckle interacting with an expanding plasma*, Phys. Plasmas 21, 032703 (2014)

[PUB79] S. Mazevet, V. Recoules, J. Bouchet, F. Guyot, M. Harmand, A. Ravasio and A. Benuzzi-Mounaix, *Ab initio calculation of x-ray absorption of iron up to 3 Mbar and 8000 K*, Phys. Rev. B 89, 100103 (2014)

[PUB80] J. Meinecke, H.W. Doyle, F. Miniati, A.R. Bell, R. Bingham, R. Crowston, R.P. Drake, M. Fatenejad, M. Koenig, Y. Kuramitsu, C.C. Kuranz, D.Q. Lamb, D. Lee, M.J. MacDonald, C.D. Murphy, H.S. Park, A. Pelka, A. Ravasio, Y. Sakawa, A.A. Schekochihin, A. Scopatz, P. Tzeferacos, W.C. Wan, N.C. Woolsey, R. Yurchak, B. Reville and G. Gregori, *Turbulent amplification of magnetic fields in laboratory laser-produced shock waves*, Nature Phys. 10, 520 (2014)

[PUB81] K. Miyanishi, N. Ozaki, E. Brambrink, N. Amadou, A. Benuzzi-Mounaix, R. Cauble, A. Diziere, F. Guyot, M. Koenig, G. Morard, T. de Resseguier, A. Ravasio, R. Smith, Y. Tange, T. Vinci, H.G. Wei and R. Kodama, *Characterization of laser-driven ultrafast shockless compression using gold targets*, J. Appl. Phys. 116, 043521 (2014)

[PUB82] A. Morace, L. Fedeli, D. Batani, S. Baton, F.N. Beg, S. Hulin, L.C. Jarrott, A. Margarit, M. Nakai, M. Nakatsutsumi, P. Nicolai, N. Piovella, M.S. Wei, X. Vaisseau, L. Volpe and J.J. Santos, *Development of x-ray radiography for high energy density physics*, Phys. Plasmas 21, 102712 (2014)

[PUB83] G. Morard, G. Garbarino, D. Antonangeli, D. Andrault, N. Guignot, J. Siebert, M. Roberge, E. Boulard, A. Lincot, A. Denoeud and S. Petitgirard, *Density measurements and structural properties of liquid and amorphous metals under high pressure*, High Pressure Res. 34, 9 (2014)

[PUB84] R. Nuter, M. Grech, P. Gonzalez de Alaiza Martinez, G. Bonnaud and E. d'Humieres, *Maxwell solvers for the simulations of the laser-matter interaction*, EPJ D 68, 1434 (2014)

[PUB85] E. Oks, E. Dalimier, A.Y. Faenov, T. Pikuz, Y. Fukuda, S. Jinno, H. Sakaki, H. Kotaki, A. Pirozhkov, Y. Hayashi, I. Skobelev, T. Kawachi, M. Kando and K. Kondo, *Two-plasmon decay instability's signature in spectral lines and spectroscopic measurements of charge exchange rate in a femtosecond laser-driven cluster-based plasma*, J. Phys. B 47, 221001 (2014)

[PUB86] F. B. Rosmej, V.A. Astapenko and V.S. Lisitsa, *Effects of ultrashort laser-pulse durations on Fano resonances in atomic spectra*, Phys. Rev. A 90, 043421 (2014)

[PUB87] R. Smets, N. Aunai, G. Belmont, C. Boniface and J. Fuchs, *On the relationship between quadrupolar magnetic field and collisionless reconnection*, Phys. Plasmas 21, 062111 (2014)

[PUB88] B. Vauzour, A. Debayle, X. Vaisseau, S. Hulin, H.-P. Schlenvoigt, D. Batani, S.D. Baton, J.J. Honrubia, P. Nicolai, F.N. Beg, R. Benocci, S. Chawla, M. Coury, F. Dorchies, C. Fourment, E. d'Humieres, L.C. Jarrot, P. McKenna, Y.J. Rhee, V.T. Tikhonchuk, L. Volpe, V. Yahia and J.J. Santos, *Unraveling resistive versus collisional contributions to relativistic electron beam stopping power in cold-solid and in warm-dense plasmas*, Phys. Plasmas 21, 033101 (2014)

[PUB89] R. Yurchak, A. Ravasio, A. Pelka, S. Pikuz, Jr., E. Falize, T. Vinci, M. Koenig, B. Loupias, A. Benuzzi-Mounaix, M. Fatenejad, P. Tzeferacos, D. Q. Lamb and E. G. Blackman, *Experimental Demonstration of an Inertial Collimation Mechanism in Nested Outflows*, Phys. Rev. Lett. 112, 155001 (2014)

2015

[PUB90] D. Albach and J.-C. Chanteloup, *Large size crystalline vs. co-sintered ceramic Yb3+:YAG disk performance in diode pumped amplifiers*, Opt. Express 23, 570-579 (2015)

[PUB91] B. Albertazzi, E. d'Humieres, L. Lancia, V. Dervieux, P. Antici, J. Boecker, J. Bonlie, J. Breil, B. Cauble, S.N. Chen, J.-L. Feugeas, M. Nakatsutsumi, P. Nicolai, L. Romagnani, R. Shepherd, Y. Sentoku, M. Swantusch, V.T. Tikhonchuk, M. Borghesi, O. Willi, H. Pepin and J. Fuchs, *A compact broadband ion beam focusing device based on laser-driven megagauss thermoelectric magnetic fields*, Rev. Sci. Instrum. 86, 043502 (2015)

[PUB92] B. Albertazzi, S.N. Chen, P. Antici, J. Boeker, M. Borghesi, J. Breil, V. Dervieux, J.-L. Feugeas, L. Lancia, M. Nakatsutsumi, P. Nicolai, L. Romagnagni, R. Shepherd, Y. Sentoku, M. Starodubtsev, M. Swantusch, V.T. Tikhonchuk, O. Willi, E. d'Humieres, H. Pepin and J. Fuchs, *Dynamics and structure of self-generated magnetics fields on solids following high contrast, high intensity laser irradiation*, Phys. Plasmas 22, 123108 (2015)

[PUB93] N. Amadou, E. Brambrink, T. Vinci, A. Benuzzi-Mounaix, G. Huser, S. Brygoo, G. Morard, F. Guyot, T. de Resseguier, S. Mazevet, K. Miyanishi, N. Ozaki, R. Kodama, O. Henry, D. Raffestin, T. Boehly and M. Koenig, *Probing iron at Super-Earth core conditions*, Phys. Plasmas 22, 022705 (2015)

[PUB94] C. Baccou, V. Yahia, S. Depierreux, C. Neuville, C. Goyon, F. Consoli, R. De Angelis, J.-E. Ducret, G. Boutoux, J. Rafelski and C. Labaune, *CR-39 track detector calibration for H, He, and C ions from 0.1-0.5 MeV up to 5 MeV for laser-induced nuclear fusion product identification*, Rev. Sci. Instrum. 86, 083307 (2015)

[PUB95] C. Baccou, S. Depierreux, V. Yahia, C. Neuville, C. Goyon, R. De Angelis, F. Consoli, J.-E. Ducret, G. Boutoux, J. Rafelski and C. Labaune, *New scheme to produce aneutronic fusion reactions by laser-accelerated ions*, Laser & Part. Beams 33, 117 (2015)

[PUB96] S. Bastiani-Ceccotti, A.-C. Bourgaux, C. Bowen, F. Dorchies, F. Gilleron, J.-R. Marquès, J.-C. Pain, V. Silvert and T. Vinci, *Analysis of X-ray and Thomson scattering data from non-LTE Nb and Ta plasmas*, HEDP 16, 41 (2015)

[PUB97] D. Batani, K. Jakubowska, A. Benuzzi-Mounaix, C. Cavazzoni, C. Danson, T. Hall, M. Kimpel, D. Neely, J. Pasley, M. Rabec Le Gloahec and B. Telaro, *Refraction index of shock compressed water in the megabar pressure range*, EPL 112, 36001 (2015)

[PUB98] D. Batani, K. Jakubowska, A. Benuzzi-Mounaix, C. Cavazzoni, C. Danson, T. Hall, M. Kimpel, D. Neely, J. Pasley, M. Rabec Le Gloahec and B. Telaro, *Refraction index of shock compressed water in the megabar pressure range – erratum*, EPL 112, 49901 (2015)

[PUB99] P.R. Bolton, M. Borghesi, C. Brenner, D.C. Carroll, C. De Martinis, F. Fiorini, A. Flacco, V. Floquet, J. Fuchs, P. Gallegos, D. Giove, J.S. Green, S. Green, B. Jones, D. Kirby, P. McKenna, D. Neely, F. Nuesslin, R. Prasad, S. Reinhardt, M. Roth, U. Schramm, G.G. Scott, S. Ter-Avetisyan, M. Tolley, G. Turchetti and J. J. Wilkens, *Instrumentation for diagnostics and control of laser-accelerated proton (ion) beams – erratum*, Physica Medica-European Journal of Medical Physics 31, 117 (2015)

[PUB100] E. Brambrink, N. Amadou, A. Benuzzi-Mounaix, M. Geissel, M. Harmand, A. Pelka, T. Vinci and M. Koenig, *Production and Diagnostics of Dense Matter*, Contrib. Plasma Physics 55, 67 (2015)

[PUB101] P. Colin-Lalu, V. Recoules, G. Salin and G. Huser, *Impact of oxygen on the 300-K isotherm of Laser MegaJoule ablator using ab initio simulation*, Phys. Rev. E 92, 053104 (2015)

[PUB102] D. Courapied, L. Berthe, P. Peyre, F. Coste, J.-P. Zou and A.-M. Sautivet, *Laser-delayed double shock-wave generation in water-confinement regime*, J. Laser Appli. 27, S29101 (2015)

[PUB103] L. Daniault, S. Bellanger, J. Le Dortz, J. Bourderionnet, E. Lallier, C. Larat, M. Antier-Murgey, J.-C. Chanteloup, A. Brignon, C. Simon-Boisson and G. Mourou, *XCAN - A coherent amplification network of femtosecond fiber chirped-pulse amplifiers*, EPJ-ST 224, 2609 (2015)

[PUB104] A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, J. Nejdl, M. Kozlova, G. Maynard, J.-P. Goddet, A. Tafzi, A. Lifschitz, H.T. Kim, S. Jacquemot, V. Malka, K. T. Phuoc, C. Thaury, P. Rousseau, G. Iaquaniello, T. Lefrou, A. Flacco, B. Vodungbo, G. Lambert, A. Rousse, P. Zeitoun and S. Sebban, *Table-top femtosecond soft X-ray laser by collisional ionization gating*, Nature Photon. 9, 817 (2015)

[PUB105] V. Dervieux, B. Loupias, S. Baton, L. Lecherbourg, K. Glize, C. Rousseaux, C. Reverdin, L. Gremillet, C. Blancard, V. Silvert, J.-C. Pain, C.R.D. Brown, P. Allan, M.P. Hill, D.J. Hoarty and P. Renaudin, *Characterization of near-LTE, high-temperature and high-density aluminum plasmas produced by ultra-high intensity lasers*, HEDP 16, 12 (2015)

[PUB106] B. Deschaud, O. Peyrusse and F.B. Rosmej, *Atomic kinetics for isochoric heating of solid aluminum under short intense XUV free electron laser irradiation*, HEDP 15, 22 (2015)

[PUB107] A. Dizière, A. Pelka, A. Ravasio, B. Loupias, E. Falize, Y. Kuramitsu, Y. Sakawa, T. Morita, S. Pikuz, R. Yurchak and M. Koenig, *Formation and propagation of laser-driven plasma jets in an ambient medium studied with X-ray radiography and optical diagnostics*, Phys. Plasmas 22, 012702 (2015)

[PUB108] F. Dorchies, F. Festa, V. Recoules, O. Peyrusse, A. Benuzzi-Mounaix, E. Brambrink, A. Levy, A. Ravasio, M. Koenig, T. Hall and S. Mazevet, *X-ray absorption K edge as a diagnostic of the electronic temperature in warm dense aluminum*, Phys. Rev. B 92, 085117 (2015)

[PUB109] D. Doria, S. Kar, H. Ahmed, A. Alejo, J. Fernandez, M. Cerchez, R.J. Gray, F. Hanton, D.A. MacLellan, P. McKenna, Z. Najmudin, D. Neely, L. Romagnani, J.A. Ruiz, G. Sarri, C. Scullion, M. Streeter, M. Swantusch, O. Willi, M. Zepf and M. Borghesi, *Calibration of BAS-TR image plate response to high energy (3-300 MeV) carbon ions*, Rev. Sci. Instrum. 86, 123302 (2015)

[PUB110] M. Dozières, F. Thais, S. Bastiani-Ceccotti, T. Blenski, J. Fariaut, W. Foelsner, F. Gilleron, D. Khaghani, J.-C. Pain, C. Reverdin, F. Rosmej, V. Silvert, G. Soullie and B. Villette, *X-ray opacity measurements in mid-Z dense plasmas with a new target design of indirect heating*, HEDP 17, 231 (2015)

[PUB111] M. Harmand, A. Ravasio, S. Mazevet, J. Bouchet, A. Denoeud, F. Dorchies, Y. Feng, C. Fourment, E. Galtier, J. Gaudin, F. Guyot, R. Kodama, M. Koenig, H.J. Lee, K. Miyanishi, G. Morard, R. Musella, B. Nagler, M. Nakatsutsumi, N. Ozaki, V. Recoules, S. Toleikis, T. Vinci, U. Zastrau, D. Zhu and A. Benuzzi-Mounaix, *X-ray absorption spectroscopy of iron at multimegabar pressures in laser shock experiments*, Phys. Rev. B 92, 024108 (2015)

[PUB112] D.P. Higginson, L. Vassura, M.M. Gugiu, P. Antici, M. Borghesi, S. Brauckmann, C. Diouf, A. Green, L. Palumbo, H. Petrascu, S. Sofia, M. Stardubtsev, O. Willi, S. Kar, F. Negoita and J. Fuchs, *Temporal Narrowing of Neutrons Produced by High-Intensity Short-Pulse Lasers*, Phys. Rev. Lett. 115, 054802 (2015)

[PUB113] D.P. Higginson, P. Korneev, J. Beard, S.N. Chen, E. d'Humieres, H. Pepin, S. Pikuz, B. Pollock, R. Riquier, V. Tikhonchuk and J. Fuchs, *A novel platform to study magnetized high-velocity collisionless shocks*, HEDP 17, 190 (2015)

[PUB114] D.P. Higginson, A. Link, H. Sawada, S.C. Wilks, T. Bartal, S. Chawla, C.D. Chen, K.A. Flippo, L.C. Jarrott, M.H. Key, H.S. McLean, P.K. Patel, F. Pérez, M.S. Wei and F.N. Beg, *High-contrast laser acceleration of relativistic electrons in solid cone-wire targets*, Phys. Rev. E 92, 063112 (2015)

[PUB115] H. Jacqmin, A. Jullien, B. Mercier, M. Hanna, F. Druon, D. Papadopoulos and R. Lopez-Martens, *Passive coherent combining of CEP-stable few-cycle pulses from a temporally divided hollow fiber compressor*, Opt. Lett. 40, 709 (2015)

[PUB116] P. Korneev, E. D'Humieres, V. Tikhonchuk, D.P. Higginson and J. Fuchs, *TNSA-like plasmas collision in an ambient magnetic field as a route to astrophysical collisionless shock observation in a laboratory*, HEDP 17, 183 (2015)

[PUB117] A.G. Krygier, J.T. Morrison, S. Kar, H. Ahmed, A. Alejo, R. Clarke, J. Fuchs, A. Green, D. Jung, A. Kleinschmidt, Z. Najmudin, H. Nakamura, P. Norreys, M. Notley, M. Oliver, M. Roth, L. Vassura, M. Zepf, M. Borghesi and R.R. Freeman, *Selective deuterium ion acceleration using the Vulcan petawatt laser*, Phys. Plasmas 22, 053102 (2015)

[PUB118] A. Levy, P. Audebert, R. Shepherd, J. Dunn, M. Cammarata, O. Ciricosta, F. Deneuville, F. Dorchies, M. Fajardo, C. Fourment, D. Fritz, J. Fuchs, J. Gaudin, M. Gauthier, A. Graf, H.J. Lee, H. Lemke, B. Nagler, J. Park, O. Peyrusse, A.B. Steel, S.M. Vinko, J.S. Wark, G.O. Williams, D. Zhu and R. W. Lee, *The creation of large-volume, gradient-free warm dense matter with an x-ray free-electron laser*, Phys. Plasmas 22, 030703 (2015)

[PUB119] M. Lobet, C. Ruyer, A. Debayle, E. d'Humieres, M. Grech, M. Lemoine and L. Gremillet, *Ultrafast Synchrotron-Enhanced Thermalization of Laser-Driven Colliding Pair Plasmas*, Phys. Rev. Lett. 115, 215003 (2015)

[PUB120] S. Mazevet, T. Tsuchiya, T. Taniuchi, A. Benuzzi-Mounaix and F. Guyot, *Melting and metallization of silica in the cores of gas giants, ice giants, and super Earths*, Phys. Rev. B 92, 014105 (2015)

[PUB121] J. Meinecke, P. Tzeferacos, A. Bell, R. Bingham, R. Clarke, E. Churazov, R. Crowston, H. Doyle, R.P. Drake, R. Heathcote, M. Koenig, Y. Kuramitsu, C. Kuranz, D. Lee, M. MacDonald, C. Murphy, M. Notley, H.-S. Park, A. Pelka, A. Ravasio, B. Reville, Y. Sakawa, W. Wan, N. Woolsey, R. Yurchak, F. Miniati, A. Schekochihin, D. Lamb and G. Gregori, *Developed turbulence and nonlinear amplification of magnetic fields in laboratory and astrophysical plasmas*, PNAS 112, 8211 (2015)

[PUB122] S.R. Mirfayzi, S. Kar, H. Ahmed, A.G. Krygier, A. Green, A. Alejo, R. Clarke, R.R. Freeman, J. Fuchs, D. Jung, A. Kleinschmidt, J.T. Morrison, Z. Najmudin, H. Nakamura, P. Norreys, M. Oliver, M. Roth, L. Vassura, M. Zepf and M. Borghesi, *Calibration of time of flight detectors using laser-driven neutron source*, Rev. Sci. Instrum. 86, 073308 (2015)

[PUB123] E. Oks, E. Dalimier, A. Faenov, T. Pikuz, Y. Fukuda, A. Andreev, J. Koga, H. Sakaki, H. Kotaki, A. Pirozhkov, Y. Hayashi, I. Skobelev, S. Pikuz, T. Kawachi, M. Kando, K. Kondo, A. Zhidkov and R. Kodama, *Revealing the second harmonic generation in a femtosecond laser-driven cluster-based plasma by analyzing shapes of Ar XVII spectral lines*, Opt. Express 23, 31991 (2015)

[PUB124] D.N. Papadopoulos, F. Friebel, A. Pellegrina, M. Hanna, P. Camy, J.-L. Doualan, R. Moncorge, P. Georges and F.P.H.J. Druon, *High Repetition Rate Yb:CaF2 Multipass Amplifiers Operating in the 100-mJ Range*, IEEE J. ST-QE 21, 3100211 (2015)

[PUB125] C. Riconda, M. Raynaud, T. Vialis and M. Grech, *Simple scalings for various regimes of electron acceleration in surface plasma waves*, Phys. Plasmas 22, 073103 (2015)

[PUB126] J.J. Santos, M. Bailly-Grandvaux, L. Giuffrida, P. Forestier-Colleoni, S. Fujioka, Z. Zhang, P. Korneev, R. Bouillaud, S. Dorard, D. Batani, M. Chevrot, J.E. Cross, R. Crowston, J.-L. Dubois, J. Gazave, G. Gregori, E. d'Humieres, S. Hulin, K. Ishihara, S. Kojima, E. Loyez, J.-R. Marquès, A. Morace, P. Nicolai, O. Peyrusse, A. Poye, D. Raffestin, J. Ribolzi, M. Roth, G. Schaumann, F. Serres, V.T. Tikhonchuk, P. Vacar and N. Woolsey, *Laser-driven platform for generation and characterization of strong quasi-static magnetic fields*, New J. Phys. 17, 083051 (2015)

[PUB127] C. Spindloe, D. Wyatt, D. Haddock, I. East, J.E. Cross, C.N. Danson, E. Falize, J.M. Foster, M. Koenig and G. Gregori, *Target fabrication for the POLAR experiment on the Orion laser facility*, HPLSE 3, e8 (2015)

[PUB128] I. Thfoin, C. Reverdin, S. Hulin, C.I. Szabo, S. Bastiani-Ceccotti, D. Batani, E. Brambrink, M. Koenig, A. Duval, X. Leboeuf, L. Lecherbourg, B. Rosse, A. Morace, J.J. Santos, X. Vaisseau, C. Fourment, L. Giuffrida and M. Nakatsutsumi, *Monte-Carlo simulation of noise in hard X-ray Transmission Crystal Spectrometers: Identification of contributors to the background noise and shielding optimization – erratum*, Rev. Sci. Instrum. 86, 049901 (2015)

[PUB129] S.D. Vergani, R. Salvaterra, J. Japelj, E. Le Floc'h, P. D'Avanzo, A. Fernandez-Soto, T. Kruehler, A. Melandri, S. Boissier, S. Covino, M. Puech, J. Greiner, L.K. Hunt, D. Perley, P. Petitjean, T. Vinci, F. Hammer, A. Levan, F. Mannucci, S. Campana, H. Flores, A. Gomboc and G. Tagliaferri, *Are long gamma-ray bursts biased tracers of star formation? Clues from the host galaxies of the Swift/BAT6 complete sample of LGRBs I. Stellar mass at z < 1*, A & A 581, A102 (2015)

[PUB130] S. Weber and C. Riconda, *Temperature dependence of parametric instabilities in the context of the shock-ignition approach to inertial confinement fusion*, HPLSE 3, e6 (2015)

[PUB131] V. Yahia, P.-E. Masson-Laborde, S. Depierreux, C. Goyon, G. Loisel, C. Baccou, N.G. Borisenko, A. Orekhov, T. Rienecker, O. Rosmej, D. Teychenne and C. Labaune, *Reduction of stimulated Brillouin backscattering with plasma beam smoothing*, Phys. Plasmas 22, 042707 (2015)

[PUB132] J.-P. Zou, C. Le Blanc, D.N. Papadopoulos, G. Cheriaux, P. Georges, G. Mennerat, F. Druon, L. Lecherbourg, A. Pellegrina, P. Ramirez, F. Giambruno, A. Fréneaux, F. Leconte, D. Badarau, J.-M. Boudenne, D. Fournet, T. Valloton, J.-L. Paillard, J.-L. Veray, M. Pina, P. Monot, J.-P. Chambaret, P. Martin, F. Mathieu, P. Audebert and F. Amiranoff, *Design and current progress of the Apollon 10 PW project*, HPLSE 3, e2 (2015)

2016

[PUB133] N. Amadou, T. de Resseguier, E. Brambrink, T. Vinci, A. Benuzzi-Mounaix, G. Huser, G. Morard, F. Guyot, K. Miyanishi, N. Ozaki, R. Kodama and M. Koenig, *Kinetics of the iron alpha-epsilon phase transition at high-strain rates: Experiment and model*, Phys. Rev. B 93, 214108 (2016)

[PUB134] N. Amadou, E. Brambrink, Th. De Rességuier, A.O. Manga, A. Aboubacar, B. Borm and A. Molineri, *Laser-driven ramp compression to investigate and model dynamic response of iron at high strain rates*, Metals 6, 11 (2016)

[PUB135] R.M. Bolis, G. Morard, T. Vinci, A. Ravasio, E. Brambrink, M. Guarguaglini, M. Koenig, R. Musella, F. Remus, J. Bouchet, N. Osaki, K. Miyanishi, T. Sekine, Y. Sakawa, T. Sano, R. Kodama, F. Guyot and A. Benuzzi-Mounaix, *Decaying shock studies of phase transitions in MgO-SiO2 systems: implications for the super-Earths' interiors*, Geophys. Res. Lett. 43, 9475 (2016)

[PUB136] G. Boutoux, D. Batani, F. Burgy, J.-E. Ducret, P. Forestier-Colleoni, S. Hulin, N. Rabhi, A. Duval, L. Lecherbourg, C. Reverdin, K. Jakubowska, C.I. Szabo, S. Bastiani-Ceccotti, F. Consoli, A. Curcio, R. De Angelis, F. Ingenito, J. Baggio and D. Raffestin, *Validation of*

modelled imaging plates sensitivity to 1-100 keV x-rays and spatial resolution characterisation for diagnostics for the "PETawatt Aquitaine Laser", Rev. Sci. Instrum. 87, 043108 (2016)

[PUB137] E. Brambrink, S. Baton, M. Koenig, R. Yurchak, N. Bidaut, B. Albertazzi, J.E. Cross, G. Gregori, A. Rigby, E. Falize, A. Pelka, F. Kroll, S. Pikuz, Y. Sakawa, N. Ozaki, C. Kuranz, M. Manuel, C. Li, P. Tzeferacos and D. Lamb, *Short-pulse laser-driven x-ray radiography*, HPLSE 4, e30 (2016)

[PUB138] K.F. Burdonov, A.A. Eremeev, N.I. Ignatova, R.R. Osmanov, A.D. Sladkov, A.A. Soloviev, M.V. Starodubtsev, V.N. Ginzburg, A.A. Kuz'min, A.V. Maslennikova, G. Revet, A.M. Sergeev, J. Fuchs, E.A. Khazanov, S. Chen, A.A. Shaykin, I.A. Shaikin and I.V. Yakovlev, *Experimental stand for studying the impact of laser-accelerated protons on biological objects*, Quantum Electron. 46, 283 (2016)

[PUB139] S.N. Chen, T. Iwawaki, K. Morita, P. Antici, S.D. Baton, F. Filippi, H. Habara, M. Nakatsutsumi, P. Nicolai, W. Nazarov, C. Rousseaux, M. Starodubstev, K.A. Tanaka and J. Fuchs, *Density and temperature characterization of long-scale length, near-critical density controlled plasma produced from ultra-low density plastic foam*, Sci. Reports 6, 21495 (2016)

[PUB140] S.N. Chen, M. Gauthier, M. Bazalova-Carter, S. Bolanos, S. Glenzer, R. Riquier, G. Revet, P. Antici, A. Morabito, A. Propp, M. Starodubtsev and J. Fuchs, *Absolute dosimetric characterization of Gafchrolic EBT3 and HDv2 films using commercial flat-bed scanners and evaluation of the scanner response function variability*, Rev. Sci. Instrum. 87, 073301 (2016)

[PUB141] M. Chiaramello, C. Riconda, F. Amiranoff, J. Fuchs, M. Grech, L. Lancia, J.-R. Marquès, T. Vinci and S. Weber, *Optimization of interaction conditions for efficient short laser pulse amplification by stimulated Brillouin scattering in the strongly coupled regime*, Phys. Plasmas 23, 072103 (2016)

[PUB142] M. Chiaramello, F. Amiranoff, C. Riconda and S. Weber, *Role of frequency chirp and energy flow directionality in the strong coupling regime of Brillouin-based plasma amplification*, Phys. Rev. Lett. 117, 235003 (2016)

[PUB143] P. Colin-Lalu, V. Recoules, G. Salin, T. Plisson, E. Brambrink, T. Vinci, R. Bolis and G. Huser, *Dissociation along the principal Hugoniot of the Laser Megajoule ablator material*, Phys. Rev. E 94, 023204 (2016)

[PUB144] J.E. Cross, G. Gregori, J.M. Foster, P. Graham, J.-M. Bonnet-Bidaud, C. Busschaert, N. Charpentier, C.N. Danson, H.W. Doyle, R.P. Drake, J. Fyrth, E.T. Gumbrell, M. Koenig, C. Krauland, C.C. Kuranz, B. Loupias, C. Michaut, M. Mouchet, S. Patankar, J. Skidmore, C. Spindloe, E.R. Tubman, N. Woolsey, R. Yurchak and E. Falize, *Laboratory analogue of a supersonic accretion column in a binary star system*, Nature Commun. 7, 11899 (2016)

[PUB145] B. Delorme, M. Olazabal-Loume, A. Casner, P. Nicolai, D.T. Michel, G. Riazuelo, N. Borisenko, J. Breil, S. Fujioka, M. Grech, A. Orekhov, W. Seka, A. Sunahara, D.H. Froula, V. Goncharov and V.T. Tikhonchuk, *Experimental demonstration of laser imprint reduction using underdense foams*, Phys. Plasmas 23, 042701 (2016)

[PUB146] A. Denoeud, N. Ozaki, A. Benuzzi-Mounaix, H. Uranishi, Y. Kondo, R. Kodama, E. Brambrink, A. Ravasio, M. Bocoum, J.-M. Boudenne, M. Harmand, F. Guyot,

S. Mazevet, D. Riley, M. Makita, T. Sano, Y. Sakawa, Y. Inubushi, G. Gregori, M. Koenig and G. Morard, *Dynamic X-ray diffraction observation of shocked solid iron up to 170 GPa*, PNAS 113, 7745 (2016)

[PUB147] A. Denoeud, S. Mazevet, F. Guyot, F. Dorchies, J. Gaudin, A. Ravasio, E. Brambrink and A. Benuzzi-Mounaix, *High-pressure structural changes in liquid silica*, Phys. Rev. E 94, 031201 (2016)

[PUB148] S. Depierreux, C. Neuville, C. Baccou, V. Tassin, M. Casanova, P.-E. Masson-Laborde, N. Borisenko, A. Orekhov, A. Colaitis, A. Debayle, G. Duchateau, A. Héron, S. Hüller, P. Loiseau, P. Nicolaï, D. Pesme, C. Riconda, G. Tran, R. Bahr, J. Katz, C. Stoeckl, W. Seka, V. Tikhonchuk and C. Labaune, *Experimental investigation of the collective Raman scattering of multiple laser beams in inhomogeneous plasmas*, Phys. Rev. Lett. 117, 235002 (2016)

[PUB149] N.P. Dover, C.A.J. Palmer, M.J.V. Streeter, H. Ahmed, B. Albertazzi, M. Borghesi, D.C. Carroll, J. Fuchs, R. Heathcote, P. Hilz, K.F. Kakolee, S. Kar, R. Kodama, A. Kon, D.A. MacLellan, S.R. Nagel, D. Neely, M.M. Notley, M. Nakatsutsumi, R. Prasad, G. Scott, M. Tampo, M. Zepf, J. Schreiber and Z. Najmudin, *Buffered high charge spectrally-peaked proton beams in the relativistic-transparency regime*, New J. Phys. 18, 013038 (2016)

[PUB150] A.Y. Faenov, E. Oks, E. Dalimier, I.Y. Skobelev, S.A. Pikuz, T.A. Pikuz, I.A. Zhvaniya, Y. Fukuda, A. Andreev, J. Koga, H. Sakaki, H. Kotaki, A. Pirozhkov, Y. Hayashi, T. Kawachi, M. Kando, K. Kondo, A. Zhidkov and R. Kodama, *X-ray spectral diagnostics of laser harmonic generation in the interaction of relativistic femtosecond laser pulses with clusters*, Quantum Electron. 46, 338 (2016)

[PUB151] S.H. Glenzer, L.B. Fletcher, E. Galtier, B. Nagler, R. Alonso-Mori, B. Barbrel, S.B. Brown, D.A. Chapman, Z. Chen, C.B. Curry, F. Fiuza, E. Gamboa, M. Gauthier, D.O. Gericke, A. Gleason, S. Goede, E. Granados, P. Heimann, J. Kim, D. Kraus, M.J. MacDonald, A.J. Mackinnon, R. Mishra, A. Ravasio, C. Roedel, P. Sperling, W. Schumaker, Y.Y. Tsui, J. Vorberger, U. Zastrau, A. Fry; W.E. White, J.B. Hasting and H.J. Lee, *Matter under extreme conditions experiments at the Linac Coherent Light Source*, J. Phys. B 49, 092001 (2016)

[PUB152] M. Hanna, F. Guichard, Y. Zaouter, D.N. Papadopoulos, F. Druon and P. Georges, *Coherent combination of ultrafast fiber amplifiers*, J. Phys. B 49, 062004 (2016)

[PUB153] Y. Kuramitsu, A. Mizuta, Y. Sakawa, H. Tanji, T. Ide, T. Sano, M. Koenig, A. Ravasio, A. Pelka, H. Takabe, C.D. Gregory, N. Woolsey, T. Moritaka, S. Matsukiyo, Y. Matsumoto and N. Ohnishi, *Time evolution of Kelvin-Helmholtz vortices associated with collisionless shocks in laser-produced plasmas*, Astrophys. J. 828, 93 (2016)

[PUB154] Y. Kuramitsu, N. Ohnishi, Y. Sakawa, T. Morita, H. Tanji, T. Ide, K. Nishio, C.D. Gregory, J.N. Waugh, N. Booth, R. Heathcote, C. Murphy, G. Gregori, J. Smallcombe, C. Barton, C. Dizière, M. Koenig, N. Woolsey, Y. Matsumoto, A. Mizuta, T. Sugiyama, S. Matsukiyo, T. Moritaka, T. Sano and H. Takabe, *Model experiment of magnetic field amplification in laser-produced plasmas via the Richtmyer-Meshkov instability*, Phys. Plasmas 23, 032126 (2016)

[PUB155] C. Labaune, C. Baccou, V. Yahia, C. Neuville and J. Rafelski, *Laser-initiated primary and secondary nuclear reactions in Boron-Nitride*, Sci. Report 6, 21202 (2016)

[PUB156] L. Lancia, A. Giribono, L. Vassura, M. Chiaramello, C. Riconda, S. Weber, A. Castan, A. Chatelain, A. Frank, T. Gangolf, M.N. Quinn, J. Fuchs and J.-R. Marquès, *Signatures of the Self-Similar Regime of Strongly Coupled Stimulated Brillouin Scattering for Efficient Short Laser Pulse Amplification*, Phys. Rev. Lett. 116, 075001 (2016)

[PUB157] B. Landgraf, B. Aurand, G. Lehmann, T. Gangolf, M. Schnell, T. Kuhl and C. Spielmann, *Broadband stimulated Raman backscattering*, New J. Phys. 18, 073048 (2016)

[PUB158] C.K. Li, P. Tzeferacos, D. Lamb, G. Gregori, P.A. Norreys, M.J. Rosenberg, R.K. Follett, D.H. Froula, M. Koenig, F.H. Seguin, J.A. Frenje, H.G. Rinderknecht, H. Sio, A.B. Zylstra, R.D. Petrasso, P.A. Amendt, H.S. Park, B.A. Remington, D.D. Ryutov, S.C. Wilks, R. Betti, A. Frank, S. X. Hu, T. C. Sangster, P. Hartigan, R.P. Drake, C.C. Kuranz, S.V. Lebedev and N.C. Woolsey, *Scaled laboratory experiments explain the kink behaviour of the Crab Nebula jet*, Nature Commun. 7, 13081 (2016)

[PUB159] S. Marrazzo, Th. Gonçalvès-Novo, F. Millet and J.-C. Chanteloup, *Low temperature diode pumped active mirror Yb3+:YAG disk laser amplifier studies*, Optics Express 24, 12651 (2016)

[PUB160] C. Neuville, V. Tassin, D. Pesme, M.-C. Monteil, P.-E. Masson-Laborde, C. Baccou, P. Fremerye, F. Philippe, P. Seytor, D. Teychenne, W. Seka, J. Katz, R. Bahr and S. Depierreux, *Experimental evidence of the collective Brillouin scattering of multiple laser beams sharing acoustic waves*, Phys. Rev. Lett. 116, 235002 (2016)

[PUB161] C. Neuville, C. Baccou, A. Debayle, P.-E. Masson-Laborde, S. Huller, M. Casanova, D. Marion, P. Loiseau, K. Glize, C. Labaune and S. Depierreux, *Spatial and transient effects during the amplification of a picosecond pulse beam by a nanosecond pump*, Phys. Rev. Lett. 117, 145001 (2016)

[PUB162] D.N. Papadopoulos, J.-P. Zou, C. Le Blanc, G. Chériaux, P. Georges, F. Druon, G. Mennerat, P. Ramirez, L. Martin, A. Freneaux, A. Beluze, N. Lebas, P. Monot, F. Mathieu and P. Audebert, *The Apollon 10PW laser: experimental and theoretical investigation of the temporal characteristics*, HPLSE 4, e34 (2016)

[PUB163] T.A. Pikuz, A.Y. Faenov, N. Ozaki, N.J. Hartley, B. Albertazzi, T. Matsuoka, K. Takahashi, H. Habara, Y. Tange, S. Matsuyama, K. Yamauchi, R. Ochante, K. Sueda, O. Sakata, T. Sekine, T. Sato, Y. Umeda, Y. Inubushi, T. Yabuuchi, T. Togashi, T. Katayama, M. Yabashi, M. Harmand, G. Morard, M. Koenig, V. Zhakhovsky, N. Inogamov, A.S. Safranova, A. Stafford, I.Y. Skobelev, S.A. Pikuz, T. Okuchi, Y. Seto, K.A. Tanaka, T. Ishikawa and R. Kodama, *Indirect monitoring shot-to-shot shock waves strength reproducibility during pump-probe experiments*, J. Appl. Phys. 120, 035901 (2016)

[PUB164] C. Riconda and S. Weber, *Raman-Brillouin interplay for inertial confinement fusion relevant laser-plasma interaction*, HPLSE 4, e23 (2016)

[PUB165] F.B. Rosmej, V.A. Astapenko and V.S. Lisitsa, *Generalized scaling laws for ioniztion of atomic states by ultra-short electromagnetic pulses*, J. Phys. B 49, 025602 (2016)

[PUB166] C. Rousseaux, S.D. Baton, D. Bénisti, L. Grémillet, B. Loupias, F. Philippe, V. Tassin, F. Amiranoff, J.L. Kline, D.S. Montgomery and B.B. Afeyan, *Experimental investigation of*

stimulated Raman and Brillouin scattering instabilities driven by two successive collinear picosecond laser pulses, Phys. Rev. E 93, 043209 (2016)

[PUB167] C. Rousseaux, K. Glize, S.D. Baton, L. Lancia, D. Bénisti and L. Grémillet, *Experimental evidence of backward Raman scattering driven cooperatively by two picosecond laser pulses propagating side by side*, Phys. Rev. Lett. 117, 015002 (2016)

[PUB168] C. Rousseaux, S.D. Baton, D. Bénisti, L. Grémillet, B. Loupias, F. Philippe, V. Tassin, F. Amiranoff, J.L. Kline, D.S. Montgomery and B.B. Afeyan, *Experimental investigation of stimulated Raman and Brillouin scattering instabilities driven by two successive collinear picosecond laser pulses: errata*, Phys. Rev. E 93, 059905 (2016)

[PUB169] C. Ruyer, L. Gremillet, G. Bonnaud and C. Riconda, *Analytical predictions of field and plasma dynamics during nonlinear Weibel-mediated flow collisions*, Phys. Rev. Lett. 117, 065001 (2016)

[PUB170] S.N. Ryazantsev, I.Y. Skobelev, A.Y. Faenov, T.A. Pikuz, D.P. Higginson, S.N. Chen, G. Revet, J. Béard, O. Portugall, A.A. Soloviev, A.N. Grum-Grzhimailo, J. Fuchs and S.A. Pikuz, *Diagnostics of laser-produced plasmas based on the analysis of intensity ratios of He-like ions X-ray emission*, Phys. Plasmas 23, 123301 (2016)

[PUB171] H. Sawada, S. Lee, T. Shiroto, H. Nagatomo, Y. Arikawa, H. Nishimura, T. Ueda, K. Shigemori, A. Sunahara, N. Ohnishi, F.N. Beg, W. Theobald, F. Pérez, P.K. Patel and S. Fujioka, *Flash Kα radiography of laser-driven solid sphere compression for fast ignition*, Appl. Phys. Lett. 108, 254101 (2016)

[PUB172] R. Torchio, F. Occelli, O. Mathon, A. Sollier, E. Lescoute, L. Videau, T. Vinci, A. Benuzzi-Mounaix, J. Headspith, W. Helsby, S. Bland, D. Eakins, D. Chapman, S. Pascarelli and P. Loubeyre, *Probing local and electronic structure in Warm Dense Matter: single pulse synchrotron x-ray absorption spectroscopy on shocked Fe*, Sci. Reports 6, 26402 (2016)

2017

[PUB173] H. Ahmed, D. Doria, M.E. Dieckmann, G. Sarri, L. Romagnani, A. Bret, M. Cerchez, A.L. Giesecke, E. Ianni, S. Kar, M. Notley, R. Prasad, K. Quinn, O. Willi and M. Borghesi, *Experimental observation of thin-shell intsbility in a collisionless plasma*, Astrophys. J. Lett. 834, L21 (2017)

[PUB174] B. Albertazzi, N. Ozaki, V. Zhakhovsky, A. Faenov, M. Harmand, N. Hartley, D. Ilnitsky, N. Inogamov, Y. Inubushi, T. Ishikawa, T. Katayama, T. Koyama, M. Koenig, A. Krygier, T. Matsuoka, S. Matsuyama, E. McBride, K.P. Migdal, G. Morard, H. Ohashi, T. Okuchi, T. Pikuz, N. Purevjav, O. Sakata, Y. Sano, T. Sato, T. Sekine, Y. Seto, K. Takahashi, K. Tanaka, Y. Tange, T. Togashi, K. Tono, Y. Umeda, T. Vinci, M. Yabashi, T. Yabuuchi, K. Yamauchi, H. Yumoto and R. Kodama, *Dynamic fracture of tantalum under extreme tensile stress*, Science Advances 3, e1602705 (2017)

[PUB175] A. Alejo, A.G. Krygier, H. Ahmed, J.T. Morrison, R.J. Clarke, J. Fuchs, A. Green, J.S. Green, D. Jung, A. Kleinschmidt, Z. Najmudin, H. Nakamura, P. Norreys, M. Notley, M. Oliver, M. Roth, L. Vassura, M. Zepf, M. Borghesi, R.R. Freeman and S. Kar, *High flux, beamed neutron sources employing deuteron-rich ion beams from D2O-ice layered targets*,

Plasma Phys. Control. Fusion 59, 064004 (2017)

[PUB176] P. Antici, E. Boella, S.N. Chen, M. Barberio, J. Böker, F. Cardelli, M. Glesser, L. Romagnani, M. Sciscio, M. Starodubtsev, O. Willi, J.C. Kieffer, H. Pépin, L. O. Silva, E. d'Humières and J. Fuchs, *Acceleration of 45 MeV protons in low-density plasmas by strong collisionless shocks driven by a 10^{20} W/cm^2, 1 µm wavelength laser*, Sci. Reports 7, 16463 (2017)

[PUB177] L. Antonelli, S. Atzeni, A. Schiavi, S.D. Baton, E. Brambrink, M. Koenig, C. Rousseaux, M. Richetta, D. Batani, P. Forestier-Colleoni, E. Le Bel, Y. Maheut, T. Nguyen-Bui, X. Ribeyre, and J. Trela, *Laser-driven shock waves studied by x-ray radiography*, Phys. Rev. E 95, 063205 (2017)

[PUB178] S.D. Baton, E. Le Bel, S. Brygoo, X. Ribeyre, C. Rousseaux, J. Breil, M. Koenig, D. Batani, and D. Raffestin, *Shock generation comparison with planar and hemispherical targets in shock ignition relevant experiment*, Phys. Plasmas 24, 092708 (2017)

[PUB179] S.N. Chen, M. Vranic, T. Gangolf, E. Boella, P. Antici, M. Bailly-Grandvaux, P. Loiseau, H. Pépin, G. Revet, J.J. Santos, A.M. Schroer, M. Starodubtsev, O. Willi, L.O. Silva, E. d'Humières and J. Fuchs, *Collimated protons accelerated from an overdense gas jet irradiated by a 1 µm wavelength high-intensity short-pulse laser*, Sci. Reports 7, 13505 (2017)

[PUB180] E. Dalimier and E. Oks, *Robust computational method for fast calculations of multicharged ion lineshapes affected by a low-frequency electrostatic plasma turbulence*, J. Phys. B 50, 025701 (2017)

[PUB181] M.E. Dieckmann, D. Folini, R. Walder, L. Romagnani, E. d'Humières, A. Bret, T. Karlsson and A. Ynnerman, *Emergence of MHD structures in a collisionless PIC simulation plasma*, Phys. Plasmas 24, 094502 (2017)

[PUB182] M.E. Dieckmann, D. Doria, H. Ahmed, L. Romagnani, G. Sarri, D. Folini, R. Walder, A. Bret and M. Borghesi, *Expansion of a radial plasma blast shell into an ambient plasma*, Phys. Plasmas 24, 094501 (2017)

[PUB183] A. Do, Ph. Troussel, S.D. Baton, V. Dervieux, D. Gontier, L. Lecherbourg, B. Loupias, L. Obst, F. Pérez, P. Renaudin, Ch. Reverdin, C. Rubbelynck, Ph. Stemmler and G. Souillé, *High resolution x-ray imaging of Al Heß lines using Fresnel phase zone plate*, Rev. Sci. Instrum 88, 013707 (2017)

[PUB184] L. Fedeli, A. Sgattoni, G. Cantono and A. Macchi, *Relativistic surface plasmon enhanced harmonic generation from gratings*, Appl. Phys. Lett. 110, 071905 (2017)

[PUB185] K. Glize, C. Rousseaux, D. Benisti, V. Dervieux, L. Gremillet, S.D. Baton and L. Lancia, *Stimulated backward Raman scattering driven collectively by two picosecond laser pulses in a bi- or multi-speckle configuration*, Phys. Plasmas 24, 032708 (2017)

[PUB186] A. Grassi, M. Grech, F. Amiranoff, F. Pegoraro, A. Macchi and C. Riconda, *Electron Weibel instability in relativistic counterstreaming plasmas with flow-aligned external magnetic fields*, Phys. Rev. E 95, 023203 (2017)

[PUB187] A. Grassi, M. Grech, F. Amiranoff, A. Macchi and C. Riconda, *Radiation-pressure-driven ion Weibel instability and collisionless shocks*, Phys. Rev. E 96, 033204 (2017)

[PUB188] A.N. Grum-Grzhimailo, T. Pikuz, A. Faenov, T. Matsuoka, N. Ozaki, B. Albertazzi, S. Pikuz, Y. Inubushi, M. Yabashi, K. Tono, H. Yumoto, H. Ohashi, T. Ishikawa and R. Kodama, *On the size of the secondary electron cloud in crystals irradiated by hard x-ray photons*, EPJ D 71, 69 (2017)

[PUB189] N.J. Hartley, N. Ozaki, T. Matsuoka, B. Albertazzi, A. Faenov, Y. Fujimoto, H. Habara, M. Harmand, Y. Inubushi, T. Katayama, M. Koenig, A. Krygier, P. Mabey, Y. Matsumura, S. Matsuyama, E.E. McBride, K. Miyanishi, G. Morard, T. Okuchi, T. Pikuz, O. Sakata, Y. Sano, T. Sato, T. Sekine, Y. Seto, K. Takahashi, K.A. Tanaka, Y. Tange, T. Togashi, Y. Umeda, T. Vinci, M. Yabashi, T. Yabuuchi, K. Yamauchi and R. Kodama, *Ultrafast observation of lattice dynamics in laser-irradiated gold foils*, Appl. Phys. Lett. 110, 071905 (2017)

[PUB190] D.P. Higginson, G. Revet, B. Khiar, J. Béard, M. Blecher, M. Borghesi, K. Burdonov, S.N. Chen, E. Filippov, D. Khaghani, K. Naughton, H. Pépin, S. Pikuz, O. Portugall, C. Riconda, R. Riquier, S.N. Ryazantsev, I.Y. Skobelev, A. Soloviev, M. Starodubtsev, T. Vinci, O. Willi, A. Ciardi and J. Fuchs, *Detailed characterization of laser-produced astrophysically-relevant jets formed via a poloidal magnetic nozzle*, HEDP 23, 48 (2017)

[PUB191] D.P. Higginson, B. Khiar, G. Revet, J. Béard, M. Blecher, M. Borghesi, K. Burdonov, S.N. Chen, E. Filippov, D. Khaghani, K. Naughton, H. Pépin, S. Pikuz, O. Portugall, C. Riconda, R. Riquier, R. Rodriguez, S.N. Ryazantsev, I.Yu. Skobelev, A. Soloviev, M. Starodubtsev, T. Vinci, O. Willi, A. Ciardi and J. Fuchs, *Enhancement of quasi-stationary shocks and heating via temporal-staging in a magnetized, laser-plasma jet*, Phys. Rev. Lett. 119, 255002 (2017)

[PUB192] N. Khasanah, C.W. Peng, C.H. Chen, T.Y. Huang, N. Boulouki, T. Moritaka, Y. Hara, H. Shimogawara, T. Sano, Y. Sakawa, Y. Sato, K. Tomita, K. Uchino, S. Matsukiyo, Y. Shoji, S. Tomita, S. Tomiya, R. Yamazaki, M. Koenig and Y. Kuramitsu, *Spatial and temporal plasma evolutions of magnetic reconnection in laser produced plasmas*, HEDP 23, 15 (2017)

[PUB193] M. Koenig, Th. Michel, R. Yurchak, C. Michaut, B. Albertazzi, S. Laffite, E. Falize, L.V. Som, Y. Sakawa, T. Sano, Y. Hara, T. Morita, Y. Kuramitsu, P. Barroso, A. Pelka, G. Gregori, R. Kodama, N. Ozaki, D. Lamb and P. Tzeferacos, *Interaction of a highly radiative shock with a solid obstacle*, Phys. Plasmas 24, 082707 (2017)

[PUB194] K.L. Lancaster, A.P.L. Robinson, J. Pasley, P. Hakel, T. Ma, K. Highbarger, F.N. Beg, S.N. Chen, R.L. Daskalova, R.R. Freeman, J.S. Green, H. Habara, P. Jaanimagi, M.H. Key, J. King, R. Kodama, K. Krushelnick, H. Nakamura, M. Nakatsutsumi, A.J. MacKinnon, A.G. MacPhee, R.B. Stephens, L. Van Woerkom and P.A. Norreys, *Observation of extremely strong shock waves in solids launched by petawatt laser heating*, Phys. Plasmas 24, 083115 (2017)

[PUB195] T. Morita, Y. Sakawa, Y. Kuramitsu, S. Dono, H. Aoki, H. Tanji, C.D Gregory, M. Koenig, N. Woolsey and H. Takabe, *Characterization of electrostatic shock in laser-produced optically-thin plasma flows using optical diagnosis*, Phys. Plasmas 24, 072701 (2017)

[PUB196] C. Neuville, K. Glize, P.-E. Masson-Laborde, P. Loiseau, S. Hüller, A. Debayle, C. Baccou, M. Casanova, C. Labaune and S. Depierreux, *Polarization modification of a spatially*

randomized picosecond pulse beam during its amplification by a nanosecond pump, Phys. Plasmas 24, 112110 (2017)

[PUB197] E. Oks, E. Dalimier, A.Ya. Faenov, P. Angelo, S.A. Pikuz, T.A. Pikuz, I.Yu. Skobelev, S.N. Ryazanzev, P. Durey, L. Doehl, D. Farley, C. Baird, K.L. Lancaster, C.D. Murphy, N. Booth, C. Spindloe, P. McKenna, N. Neumann, M. Roth, R. Kodama and N. Woolsey, *In-depth study of intra-Stark spectroscopy in the x-ray range in relativistic laser-plasma interactions*, J. Phys. B 50, 245006 (2017)

[PUB198] E. Oks, E. Dalimier, A.Ya. Faenov, P. Angelo, S.A. Pikuz, E. Tubman, N.M.H. Butler, R.J. Dance, T.A. Pikuz, I.Yu. Skobelev, M.A. Alkhimova, N. Booth, J. Green, C. Gregory, A. Andreev, A. Zhidkov, R. Kodama, P. McKenna and N. Woolsey, *Using x-ray spectroscopy of relativistic laser plasma interaction to reveal parametric decay instabilities: a modeling tool for astrophysics*, Optics Express 25, 1958 (2017)

[PUB199] M. Oliver, T. White, P. Mabey, M. Kühn-Kauffeldt, L. Döhl, R. Bingham, R. Clarke, P. Graham, R. Heathcote, M. Koenig, Y. Kiramitsu, D.Q. Lamb, J. Meinecke, T. Michel, F. Miniati, M. Notley, B. Reville, S. Sarkar, Y. sakawa, A.A. Schekochihin, P. Tzeferacos, N. Woolsey, H.-S. Park and G. Gregori, *Magneto-optic probe measuremnts in low density-supersonic jets*, J. Instrumentation 12, P12001 (2017)

[PUB200] D.N. Papadopoulos, P. Ramirez, K. Genevrier, L. Ranc, N. Lebas, A. Pellegrina, C. Le Blanc, P. Monot, L. Martin, J.-P. Zou, F. Mathieu, P. Audebert, P. Georges and F. Druon, *High-contrast 10fs OPCPA-based front end for multi-PW laser chains*, Optics Lett. 42, 3530 (2017)

[PUB201] C.R. Phipps, M. Boustie, J.-M. Chevalier, S. Baton, E. Brambrink, L. Berthe, M. Schneider, L. Videau, S.A.E. Boyer and M. Scharring, *Laser impulse coupling measurements at 400 fs and 80 ps using the LULI facility at 1057 nm wavelength*, J. Appl. Phys. 122, 193103 (2017)

[PUB202] S.A. Pikuz, I.Yu. Skobelev, M.A. Alkhimova, G.V. Pokrovskii, J. Colgan, T.A. Pikuz, A.Ya. Faenov, A.A. Soloviev, K.F. Burdonov, A.A. Eremeev, A.D. Sladko, R.R. Osmanov, M.V. Starodubtsev, V.N. Ginzburg, A.A. Kuz'min, A.M. Sergeev, J. Fuchs, E.A. Khazanov, A.A. Shaikin, I.A. Shaikin and I.V. Yakovlev, *Formation of a Plasma with the Determining Role of Radiative Processes in Thin Foils Irradiated by a Pulse of the PEARL Subpetawatt Laser*, JETP Lett. 105, 13 (2017)

[PUB203] I. Prencipe, J. Fuchs, S. Pascarelli, D.W. Schumacher, R.B. Stephens, N.B. Alexander, R. Briggs, M. Büscher, M.O. Cernaianu, A. Choukourov, M. De Marco, A. Erbe, J. Fassbender, G. Fiquet, P. Fitzsimmons, C. Gheorghiu, J. Hund, L.G. Huang, M. Harmand, N.J. Hartley, A. Irman, T. Kluge, Z. Konopkova, S. Kraft, D. Kraus, V. Leca, D. Margarone, J. Metzkes, K. Nagai, W. Nazarov, P. Lutoslawski, D. Papp, M. Passoni, A. Pelka, J.-P. Perin, J. Schulz, M. Smid, C. Spindloe, S. Steinke, R. Torchio, C. Vass, T. Wiste, R. Zaffino, K. Zeil, T. Tschentscher, U. Schramm and T.E. Cowan, *Targets for high repetition rate laser facilities: needs, challenges and perspectives*, HPLSE 5, e17 (2017)

[PUB204] G. Revet, S.N. Chen, R. Bonito, B. Khiar, E. Filippov, C. Argiroffi, D.P. Higginson, S. Orlando, J. Béard, M. Blecher, M. Borghesi, K. Burdonov, D. Khani, K. Naughton, H. Pépin, O. Portugall, R. Riquier, R. Rodriguez, S.N. Ryazantsev, I.Yu. Skobelev, A. Soloviev, O. Willi, S. Pikuz, A. Ciardi and J. Fuchs, *Laboratory unraveling of matter accretion in young stars*, Science Advances 3, e1700982 (2017)

[PUB205] F.B. Rosmej, V.A. Astapenko, V.S. Lisitsa and N.N. Moroz, *Nonlinear resonance scattering of femtosecond x-ray pulses on atoms in plasmas*, Phys. Lett. A 41, 3576 (2017)

[PUB206] F.B. Rosmej, V.A. Astapenko, V.S. Lisitsa and V.A. Kurnaev, *About the correlation and physical foundation of thermodynamic and information entropy: Γ-phase space and the impact of the outer world*, J. Atom. Mol. Condens. & Nano Phys. 4, 21 (2017)

[PUB207] F.B. Rosmej, V.A. Astapenko and V.S. Lisitsa, *Bremsstrahlung of fast electrons near Fano resonance with account for polarization channel*,

[PUB208] J. Atom. Mol. Condens. & Nano Phys. 4, 15 (2017)

[PUB209] F.B. Rosmej, V.A. Astapenko and V.S. Lisitsa, *XUV and x-ray elastic scattering of attosecond electromagnetic pulses on atoms*, J. Phys. B 50, 235601 (2017)

[PUB210] J.S. Ross, D.P. Higginson, D. Ryutov, F. Fiuza, R. Hatarik, C.M. Huntington, D.H. Kalantar, A. Link, B.B. Pollock, B.A. Remington, H.G. Rinderknecht, G.F. Swadling, D.P. Turnbull, S. Weber, S. Wilks, D.H. Froula, M.J. Rosenberg, T. Morita, Y. Sakawa, H. Takabe, R.P. Drake, C. Kuranz, G. Gregori, J. Meinecke, M.C. Levy, M. Koenig, A. Spitkovsky, R.D. Petrasso, C.K. Li, H. Sio, B. Lahmann, A.B. Zylstra and H.-S. Park, *Transition from Collisional to Collisionless Regimes in Interpenetrating Plasma Flows on the National Ignition Facility*, Phys. Rev. Lett. 118, 185003 (2017)

[PUB211] H. Sawada, T. Daykin, H.S. McLean, H. Chen, P.K. Patel, Y. Ping and F. Pérez, *Two-color monochromatic x-ray imaging with a single short-pulse laser*, Rev. Sci. Instrum. 88, 063502 (2017)

[PUB212] C. Scullion, D. Doria, L. Romagnani, A. Sgattoni, K. Naughton, P. McKenna, A. Macchi, M. Zepf, S. Kar and M. Borghesi, *Polarization dependence of bulk ion acceleration from ultrathin foils irradiated by high-intensity ultrashort laser pulses*, Phys. Rev. Lett. 119, 054801 (2017)

[PUB213] A. Sgattoni, F. Amiranoff, C. Briand, P. Henri, M. Grech and C. Riconda, *Beam-plasma instability and density holes: Langmuir wave-packet formation and particle acceleration*, Phys. Plasmas 24, 072103 (2017)

[PUB214] E. Siminos, M. Grech, B. Svedung Wettervik and T. Fülöp, *Kinetic and finite ion mass effects on the transition to relativistic self-induced transparency in laser-driven ion acceleration*, New J. Phys. 19, 123042 (2017)

[PUB215] A. Soloviev, K. Burdonov, S.N. Chen, A. Eremeev, A. Korzhimanov, G.V. Pokrovskiy, T.A. Pikuz, G. Revet, A. Sladkov, V. Ginzburg, E. Khazanov, A. Kuzmin, R. Osmanov, I. Shaikin, A. Shaykin, I. Yakovlev, S. Pikuz, M. Starodubtsev and J. Fuchs, *Experimental evidence for short-pulse laser heating of solid-density target to high bulk temperatures*, Sci. Reports 7, 12144 (2017)

[PUB216] X. Vaisseau, A. Morace, M. Touati, M. Nakatsutsumi, S.D. Baton, S. Hulin, Ph. Nicolaï, R. Nuter, D. Batani, F.N. Beg, J. Breil, R. Fedosejevs, J.-L. Feugeas, P. Forestier-Colleoni, C. Fourment, S. Fujioka, L. Giuffrida, S. Kerr, H.S. McLean, H. Sawada, V.T. Tikhonchuk, and J.J. Santos, *Collimated Propagation of Fast Electron Beams Accelerated by High-Contrast Laser Pulses in Highly Resistive Shocked Carbon*, Phys. Rev. Lett. 118, 205001 (2017)

[PUB217] J. Warwick, T. Dzelzainis, M.E. Dieckmann, W. Schumaker, D. Doria, L. Romagnani,

K. Poder, J.M. Cole, A. Alejo, M. Yeung, K. Krushelnick, S.P.D. Mangles, Z. Najmudin, B. Reville, G.M. Samarin, D.D. Symes, A.G.R. Thomas, M. Borghesi and G. Sarri, *Experimental observation of a current-driven instability in a neutral electron-positron beam*, Phys. Rev. Lett. 119, 185002 (2017)

[PUB218] H.G. Wei, E. Brambrink, N. Amadou, A. Benuzzi-Mounaix, A. Ravasio, G. Morard, F. Guyot, T. de Rességuier, N. Ozaki, K. Miyanishi, G. Zhao and M. Koenig, *Measurement of iron characteristics under ramp compression*, Chinese Phys. B 26, 115205 (2017)

2018

[PUB219] F. Amiranoff, C. Riconda, M. Chiaramello, L. Lancia, J.R. Marquès and S. Weber, *The role of the global phase in the spatio-temporal evolution of strong-coupling Brillouin scattering*, Phys. Plasmas 25, 013114 (2018)

[PUB220] M. Bailly-Grandvaux, J.J. Santos, C. Bellei, P. Forestier-Colleoni, S. Fujioka, L. Giuffrida, J.J. Honrubia, D. Batani, R. Bouillaud, M. Chevrot, J.E. Cross, R. Crowston, S. Dorard, J.-L. Dubois, M. Ehret, G. Gregori, S. Hulin, S. Kojima, E. Loyez, J.-R. Marquès, A. Morace, Ph. Nicolaï, M. Roth, S. Sakata, G. Schaumann, F. Serres, J. Servel, V.T. Tikhonchuk, N. Woolsey and Z. Zhang, *Guiding of relativistic electron beams in dense matter by laser-driven magnetostatic fields*, Nature Commun. 9, 102 (2018)

[PUB221] M. Barberio, M. Sciscio, S. Vallieres, F. Cardelli, S.N. Chen, G. Famulari, T. Gangolf, G. Revet, A. Schiavi, M. Senzacqua and P. Antici, *Laser-accelerated particle beams for stress testing of materials*, Nature Commun. 9, 372 (2018)

[PUB222] M. Barberio, M. Sciscio, S. Vallieres, F. Cardelli, S.N. Chen, G. Famulari, T. Gangolf, G. Revet, A. Schiavi, M. Senzacqua and P. Antici, *Publisher Corrections*: *Laser-accelerated particle beams for stress testing of materials*, Nature Commun. 9, 1966 (2018)

[PUB223] G. Cantono, A. Sgattoni, L. Fedeli, D. Gazella, F. Réau, C. Riconda, A. Macchi and T. Ceccotti, *Extensive study of electron acceleration by relativistic surface plasmons* Phys. Plasmas 25, 031907 (2018)

[PUB224] J. Derouillat, A. Beck, F. Pérez, T. Vinci, M. Chiaramello, A. Grassi, M. Flé, G. Bouchard, I. Plotnikov, N. Aunai, J. Dargent, C. Riconda and M. Grech, *Smilei: a collaborative, open-source, multi-purpose particle-in-cell code for plasma simulation*, Comput. Physics Commun. 222, 351 (2018)

[PUB225] M.E. Dieckmann, Q. Moreno, D. Doria, L. Romagnani, G. Sarri, D. Follini, R. Walder, A. Bret, E. d'Humières and M. Borghesi, *Expansion of a radially symmetric blast shell into a uniform magnetized plasma*, Phys. Plasmas 25, 052108 (2018)

[PUB226] L.A. Gizzi, P. Koester, L. Labate, F. Mathieu, Z. Mazzotta, G. Toci and M. Vannini, *A viable laser driver for a user plasma accelerator*, Nucl. Instrum. & Meth. Phys. Res. A in press (2018) https://doi.org/10.1016/j.nima.2018.02.089

[PUB227] Th. Michel, E. Falize, B. Albertazzi, G. Rigon, Y. Sakawa, T. Sano, H. Shimogawara, R. Kumar, T. Morita, C. Michaut, A. Casner, P. Barroso, P. Mabey, Y. Kuramitsu, S. Laffite, L. Van Box Som, G. Gregori, R. Kodama, N. Ozaki, P. Tzeferacos, D. Lamb and M. Koenig, *Analytical modelling of the expansion of a solid obstacle interacting with a radiative shock*, HPLSE 6, e30 (2018)

[PUB228] K. Mima, J. Fuchs, T. Taguchi, J. Alvarez, J.-R. Marquès, S.N. Chen, T. Tajima and

J.M. Perlado, *Self-modulation and anomalous collective scattering of laser produced intense ion beam in plasmas*, Matter & Radiation at Extremes 3, 127 (2018)

[PUB229] M. Nakatsutsumi, Y. Sentoku, S.N. Chen, S. Buffechoux, A. Kon, A. Korzhimanov, L. Gremillet, B. Atherton, P. Audebert, M. Geissel, L. Hurd, M. Kimmel, P. Rambo, M. Schollmeier, J. Schwarz, M. Starodubtsev, R. Kodama and J. Fuchs, *Self-generated surface magnetic fields inhinit laser-driven sheath acceleration of high-energy protons*, Nature Commun. 9, 280 (2018)

[PUB230] F. Niel, C. Riconda, F. Amiranoff, R. Duclous and M. Grech, *From quantum to classical modeling of radiation reaction: a focus on stochasticity effects*, Phys. Rev. E 97, 043209 (2018)

[PUB231] C.R. Phipps, C. Bonnal, F. Masson, M. Boustie, L. Berthe, M. Schneider, S. Baton, E. Brambrink, J.-M. Chevalier, L. Videau and S.A.E. Boyer, *Transfers from Earth to LEO and LEO to interplanetary space using lasers*, Acta Astronautica 146, 92 (2018)

[PUB232] I. Plotnikov, A. Grassi and M. Grech, *Perprendicular relativistic shocks in magnetized pair plasmas*, M.N.R.A.S. 477, 5238 (2018)

[PUB233] J.E. Rice, F.B. Rosmej, N. Cao, M. Chilenski, N.T. Howard, A.E. Hubbard, J.W. Hughes, J.H. Irby, Y. Lin, P. Rodriguez-Fernandez, S.M. Wolfe, S.J. Wukitch, M. Bitter, L. Delgado-Aparicio, K. Hill and M.L. Reinke, *X-ray observation of K-beta emission from medium Z He-like ions in C-Mod tokamak plasmas*, J. Phys. B 51, 035702 (2018)

[PUB234] A. Rigby, F. Cruz, B. Albertazzi, R. Bamford, A.R. Bell, J.E. Cross, F. Fraschetti, P. Graham, Y. Hara, P.M. Kozlowski, Y. Kuramitsu, D.Q. Lamb, S. Lebedev, J.-R. Marquès, F. Miniati, T. Morita, M. Oliver, B. Reville, Y. Sakawa, S. Sarkar, C. Spindloe, R. Trines, P. Tzeferacos, L.O. Silva, R. Bingham, M. Koenig and G. Gregori, *Electron acceleration by wave turbulence in a magnetized plasma*, Nature Phys. 14, 475 (2018)

[PUB235] F.B. Rosmej, *Ionization potential depression in an atomic-solid-plasma picture*, J. Phys. B 51, 09LT01 (2018)

[PUB236] F. Russman, S. Marini, E. Peter, G.I. de Oliveira and F.B. Rizzato, *Self-focusing in a spatially modulated electrostatic firled particle accelerator*, Phys. Plasmas 25, 023110 (2018)

[PUB237] P. Tzeferacos, A. Rigby, A.F.A. Bott, A.R. Bell, R. Bingham, A. Casner, F. Cattaneo, E.M. Churazov, J. Emig, F. Fiuza, C.B. Forest, J. Foster, C. Graziani, J. Katz, M. Koenig, C.K. Li, J. Meinecke, R. Petrasso, H.S. Park, B.A. Remington, J.S. Ross, D. Ryu, D. Ryutov, T.G. White, B. Reville, F. Miniati, A.A. Schekochihin, D.Q. Lamb, D.H. Froula and G. Gregori, *Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma*, Nature Commun. 9, 591 (2018)

[PUB238] L. Van Box Som, E. Falize, M. Koenig, Y. Sakawa, B. Albertazzi, P. Barroso, J.-M. Bonnet Bidaud, C. Busschaert, A. Ciardi, Y. Hara, N. Katsuri, R. Kullar F. Lefevre, C. Michaut, Th. Michel, T. Miura, T. Morita, M. Mouchet, G. Rigon, T. Sano, S. Shiiba, H. Shimogawara and S. Tomiya, *Laboratory radiative accretion shocks on GEKKO XII laser facility for POLAR project*, HPLSE 6, e35 (2018)

[PUB239] G.O. Williams, S. Künzel, S. Daboussi, B. Iwan, A.I. Gonzalez, W. Boutu, V. Hilbert, U. Zastrau, H.J. Lee, B. Nagler, E. Granados, E. Galtier, P. Heimann, B. Barbrel, G. Dovillaire, R.W. Lee, J. Dunn, V. Recoules, C. Blancard, P. Renaudin, A.G. de la Varga,

P. Velarde, P. Audebert, H. Merdji, P. Zeitoun and M. Fajardo, *Tracking the ultrafast XUV optical properties of x-ray free-electron-laser heated matter with high-order harmonics*, Phys. Rev. A 97, 023414 (2018)

Summary papers [OV]

2013

[OV1] C. Labaune, *Effect of the laser wavelength: a long story of laser-plasma interaction physics for Inertial Confinement Fusion Teller Medal Lecture*, EPJ Web Conf. 59, 01012 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

2014

[OV2] D. Batani, S. Baton, A. Casner, S. Depierreux, M. Hohenberger, O. Klimo, M. Koenig, C. Labaune, X. Ribeyre, C. Rousseaux, G. Schurtz, W. Theobald and V.T. Tikhonchuk, *Physics issues for shock ignition*, Nucl. Fusion 54, 054009 (2014)

[OV3] J. Fuchs, *Summary of the Working Group 2: Ion beams from plasmas*, Nucl. Instrum. & Meth. Phys. Res. A 740, 81 (2014) [1st European Advanced Accelerator Concepts Workshop (EAAC2013), 02-07/06/2013, Isola d'Elba (Italy)]

[OV4] P. Norreys, D. Batani, S. Baton, F.N. Beg, R. Kodama, P.M. Nilson, P. Patel, F. Pérez, J.J. Santos, R.H.H. Scott, V.T. Tikhonchuk, M. Wei and J. Zhang, *Fast electron energy transport in solid density and compressed plasma*, Nucl. Fusion 54, 054004 (2014)

[OV5] F.B. Rosmej, R. Dachicourt, B. Deschaud, D. Khaghani, M. Dozières, M. Smid and O. Renner, *Exotic x-ray emission from dense plasmas*, J. Phys. B 48, 224005 (2015)

2016

[OV6] F. Negoita, M. Roth, P.G. Thirolf, S. Tudisco, F. Hannachi, S. Moustaizis, I. Pomerantz, P. McKenna, J. Fuchs, K. Sphor, G. Acbas, A. Anzalone, P. Audebert, S. Balascuta, F. Cappuzzello, M.O. Cernaianu, S. Chen, I. Dancus, R. Freeman, H. Geissel, P. Ghenuche, L. Gizzi, F. Gobet, G. Gosselin, M. Gugiu, D. Higginson, E. d'Hulieres, C. Ivan, D. Jaroszynski, S. Kar, L. Lamia, V. Leca, L. Neagu, g. Lanzalone, V. Meot, S.R. Mirfayzi, I.O. Mitu, P. Morel, C. Murphy, C. Petcu, H. Petrascu, C. Petrone, P. Raczka, M. Risca, F. Rotaru, J.J. Santos, D. Schumacher, D. Stutman, M. Tarisien, M. Tataru, B. Tatulea, I.C.E. Turcu, M. Versteegen, D. Ursescu, S. Gales and N.V. Zamfir, *Laser driven nuclear physics at ELI-NP*, Romanian Reports in Physics 68, S37 (2016)

[OV7] D. Ursescu, G. Chériaux, P. Audebert, M. Kalashnikov, T. Toncian, M. Cerchez, M. Kaluza, G. Paulus, G. Priebe, R. Dabu, M.O. Cernaianu, M. Dinescu, T. Asavei, I. Dancus, L. Neagu, A. Boianu, C. Hooker, C. Barty and C. Haefner, *Laser beam delivery at ELI-NP*, Romanian Reports in Physics 68, S11 (2016)

2017

[OV8] S. Jacquemot, *Inertial confinement fusion for energy: overview of the ongoing experimental, theoretical and numerical studies*, Nuclear Fusion 57, 102024 (2017) [26th IAEA Fusion Energy Conference, 17-22/10/2016, Kyoto (Japan)]

Conference proceedings in refereed journals [PUB-SI]

2013

[PUB-SI1] D. Albach, T. Gonçalvès-Novo and J.-C. Chanteloup, *Experimental cross evaluation of large size ceramic and crystalline Yb3+:YAG laser gain media performance at high average power*, Plasma & Fusion Res. 8, 3405049 (2013) [1st conference on Inertial Fusion Energy (CIFE'12), 25-27/04/2012, Yokohama (Japan)]

[PUB-SI2] J.-C. Chanteloup, A. Lucianetti, D. Albach and T. Gonçalvès-Novo, *Low Pressure Helium Cooled Active Mirror Amplifiers for HiPER KiloJoule Beamlines*, Plasma & Fusion Res. 8, 3404043 (2013) [1st conference on Inertial Fusion Energy (CIFE'12), 25-27/04/2012, Yokohama (Japan)]

[PUB-SI3] E. d'Humières, P. Antici, M. Glesser, J. Boeker, F. Cardelli, S. Chen, J.L. Feugeas, F. Filippi, M. Gauthier, A. Levy, P. Nicolai, H. Pepin, L. Romagnani, M. Sciscio, V.T. Tikhonchuk, O. Willi, J.C. Keifer and J. Fuchs, *Investigation of laser ion acceleration in low-density targets using exploded foils*, Plasma Phys. Control. Fusion 55, 124025 (2013) [40th EPS conference on Plasma Physics (EPS-DPP2013), 1-5/07/2013, Espoo (Finland)]

[PUB-SI4] J.-E. Ducret, S. Bastiani-Ceccotti, D. Batani, N. Banchot, E. Brambrink, A. Cassner, T. Ceccotti, A. Compant La Fontaine, E. d'Humières, S. Dobosz-Dufrenoy, A. Duval, J. Fuchs, S. Hulin, M. Koenig, I. Lantuejoul-Thfoin, E. Lefebvre, J.-R. Marquès, J.-L. Miquel, C. Reverdin, L. Serani, C. Szilla-Foster and R. Wrobel, *The PETAL plus project: X-ray and charged particle diagnostics for plasma experiments at LMJ-PETAL*, Nucl. Instrum. & Meth. Phys. Res. A 720, 141 (2013) [2nd international conference on Frontiers in Diagnostic Technologies (FDT2011), 28-30/11/2011, Frascati (Italy)]

[PUB-SI5] J. Kawanaka, D. Albach, H. Furuse, N. Miyanaga, T. Kawashima and H. Kan, *A monolithic composite ceramic with total-reflection active mirrors for joule-class pulse energy amplification*, Opt. Mat. 35, 770 (2013) [7th Laser Ceramics Symposium (LCS2011), 14-17/11/2011, Singapore (Singapore)]

[PUB-SI6] N.L. Kugland, J.S. Ross, P.Y. Chang, R.P. Drake, G. Fiksel, D.H. Froula, S.H. Glenzer, G. Gregori, M. Grosskopf, C. Huntington, M. Koenig, Y. Kuramitsu, C. Kuranz, M.C. Levy, E. Liang, D. Martinez, J. Meinecke, F. Miniati, T. Morita, A. Pelka, C. Plechaty, R. Pressura, A. Ravasio, B.A. Remington, B. Reville, D.D. Ryutov, Y. Sakawa, A. Spitkovsky, H. Takabe and H.S. Park, *Visualizing electromagnetic fields in laser-produced counter-streaming plasma experiments for collisionless shock laboratory astrophysics*, Phys. Plasmas 20, 056313 (2013) [54th annual meeting of the APS Plasma Physics Division (APS-DPP2012), 29/10-02/11/2012, Province (RI, USA)]

2014

[PUB-SI7] S.N. Chen, S. Atzeni, M. Gauthier, D.P. Higginson, F. Mangia, J.-R. Marquès, R. Riquier and J. Fuchs, *Proton stopping power measurements using high intensity short pulse lasers produced proton beams*, Nucl. Instrum. & Meth. Phys. Res. A 740, 105 (2014) [1st European Advanced Accelerator Concepts Workshop (EAAC2013), 02-07/06/2013, Isola d'Elba (Italy)]

[PUB-SI8] B. Cros, B.S. Paradkar, X. Davoine, A. Chance, F.G. Desforges, S. Dobosz-Dufrenoy, N. Delerue, J. Ju, T.L. Audet, G. Maynard, M. Lobet, L. Gremillet, P. Mora, J. Schwindling,

O. Delferriere, C. Bruni, C. Rimbault, T. Vinatier, A. Di Piazza, M. Grech, C. Riconda, J.-R. Marquès, A. Beck, A. Specka, P. Martin, P. Monot, D. Normand, F. Mathieu, P. Audebert and F. Amiranoff, *Laser plasma acceleration of electrons with multi-PW laser beams in the frame of CILEX*, Nucl. Instrum. & Meth.Phys. Res. A 740, 27 (2014) [1st European Advanced Accelerator Concepts Workshop (EAAC2013), 02-07/06/2013, Isola d'Elba (Italy)]

[PUB-SI9] M. Gauthier, L.B. Fletcher, A. Ravasio, E. Galtier, E.J. Gamboa, E. Granados, J.B. Hastings, P. Heimann, H.J. Lee, B. Nagler, A. Schropp, A. Gleason, T. Doeppner, S. LePape, T. Ma, A. Pak, M.J. MacDonald, S. Ali, B. Barbrel, R. Falcone, D. Kraus, Z. Chen, M. Mo, M. Wei and S. H. Glenzer, *New experimental platform to study high density laser-compressed matter*, Rev. Sci. Instrum. 85, 11e616 (2014) [20th topical conference on High-Temperature Plasma Diagnostics (HTPD2014), 01-05/06/2014, Atlanta (GA, USA)]

[PUB-SI10] J.S. Green, N.P. Dover, M. Borghesi, C.M. Brenner, F.H. Cameron, D.C. Carroll, P.S. Foster, P. Gallegos, G. Gregori, P. McKenna, C.D. Murphy, Z. Najmudin, C.A.J. Palmer, R. Prasad, L. Romagnani, K. E. Quinn, J. Schreiber, M.J.V. Streeter, S. Ter-Avetisyan, O. Tresca, M. Zepf and D. Neely, *Enhanced proton beam collimation in the ultra-intense short pulse regime*, Plasma Phys. Control. Fusion 56, 084001 (2014)

[PUB-SI11] I. Thfoin, C. Reverdin, S. Hulin, C.I. Szabo, S. Bastiani-Ceccotti, D. Batani, E. Brambrink, M. Koenig, A. Duval, X. Leboeuf, L. Lecherbourg, B. Rosse, A. Morace, J.J. Santos, X. Vaisseau, C. Fourment, L. Giuffrida and M. Nakatsutsumi, *Monte-Carlo simulation of noise in hard X-ray Transmission Crystal Spectrometers: Identification of contributors to the background noise and shielding optimization*, Rev. Sci. Instrum. 85, 11d615 (2014) [20th topical conference on High-Temperature Plasma Diagnostics (HTPD2014), 01-05/06/2014, Atlanta (GA, USA)]

2015

[PUB-SI12] H. Chen, A. Link, Y. Sentoku, P. Audebert, F. Fiuza, A. Hazi, R.F. Heeter, M. Hill, L. Hobbs, A.J. Kemp, G.E. Kemp, S. Kerr, D.D. Meyerhofer, J. Myatt, S.R. Nagel, J. Park, R. Tommasini and G.J. Williams, *The scaling of electron and positron generation in intense laser-solid interactions*, Phys. Plasmas 22, 056705 (2015) [56th annual meeting of the APS Division of Plasma Physics, 27-31/10/2014, New Orleans (LA, USA)]

[PUB-SI13] T. Iwawaki, H. Habara, S. Baton, K. Morita, J. Fuchs, S. Chen, M. Nakatsutsumi, C. Rousseaux, F. Filippi, W. Nazarov and K.A. Tanaka, *Collimation of fast electrons in critical density plasma channel*, Plasma & Fusion Res. 10, 1304005 (2015)

[PUB-SI14] H.S. Park, C.M. Huntington, F. Fiuza, R.P. Drake, D.H. Froula, G. Gregori, M. Koenig, N.L. Kugland, C.C. Kuranz, D.Q. Lamb, M.C. Levy, C.K. Li, J. Meinecke, T. Morita, R.D. Petrasso, B.B. Pollock, B.A. Remington, H.G. Rinderknecht, M. Rosenberg, J.S. Ross, D.D. Ryutov, Y. Sakawa, A. Spitkovsky, H. Takabe, D.P. Turnbull, P. Tzeferacos, S.V. Weber and A.B. Zylstra, *Collisionless shock experiments with lasers and observation of Weibel instabilities*, Phys. Plasmas 22, 056311 (2015) [56th annual meeting of the APS Division of Plasma Physics, 27-31/10/2014, New Orleans (LA, USA)]

[PUB-SI15] C. Riconda, S. Weber, L. Lancia, J.-R. Marquès, G. Mourou and J. Fuchs, *Plasma-based creation of short light pulses: analysis and simulation of amplification and focusing*,

Plasma Phys. Control. Fusion 57, 014002 (2015) [41st European Physical Society Conference on Plasma Physics, 22-26/06/2014, Berlin (Germany)]

2016

[PUB-SI16] L.B. Fletcher, U. Zastrau, E. Galtier, E.J. Gamboa, S. Goede, W. Schumaker, A. Ravasio, M. Gauthier, M.J. MacDonald, Z. Chen, E. Granados, H.J. Lee, A. Fry, J.B. Kim, C. Roedel, R. Mishra, A. Pelka, D. Kraus, B. Barbrel, T. Doeppner and S.H. Glenzer, *X-ray spectral diagnostics of laser harmonic generation in the interaction of relativistic femtosecond laser pulses with clusters*, Rev. Sci. Instrum. 87, 3 (2016) [21st topical conference on High-Temperature Plasma Diagnostics (HTPD2016), 05-09/06/2016, Madison (WI, USA)]

[PUB-SI17] A. Grassi, L. Fedeli, A. Sgattoni and A. Macchi, *Vlasov simulation of laser-driven shock acceleration and ion turbulence*, Plasma Phys. Control. Fusion 58, 034021 (2016) [2015 international Laser and Plasma Accelerators Workshop (LPA2015), 10-15/05/2015, Guadeloupe (France)]

2017

[PUB-SI18] C. Ruyer, L. Gremiller, G. Bonnaud and C. Riconda, *A self-consistent analytical model for the upstream magnetic-field and ion-beam properties in Weibel-mediated collisionless shocks*, Phys. Plasmas 24, 041409 (2017) [11th International Conference on High Energy Density Laboratory Astrophysics (HEDLA2016), 16-20/05/2016, Menlo Park (CA, USA)]

[PUB-SI19] G. Sarri, J. Warwick, W. Schumaker, K. Poder, J. Cole, D. Doria, T. Dzelzainis, K. Krushelnick, S. Kuschel, S.P.D. Mangles, Z. Najmudin, L. Romagnani, G.M. Samarin, D. Symes, A.G.R. Thomas, M. Yeung and M. Zepf, *Spectral and spatial characterisation of laser-driven positron beams*, Plasma Phys. Control. Fusion 59, 014105 (2017) [43rd EPS Conference on Plasma Physics (EPS-DPP2016), 4-8/07/2016, Leuven (Belgium)]

[PUB-SI20] P. Tzeferacos, A. Rigby, A. Bott, A.R. Bell, R. Bingham, A. Casner, F. Cattaneo, E.M. Churazov, J. Emig, N. Flocke, F. Fiuza, C.B. Forest, J. Foster, C. Graziani, J. Katz, M. Koenig, C.K. Li, J. Meinecke, R. Petrasso, H.-S. Park, B.A. Remington, J.S. Ross, D. Ryu, D. Ryutov, K. Weide, T.G. White, B. Reville, F. Miniati, A.A. Schekochihin, D.H. Froula, G. Gregori and D.Q. Lamb, *Numerical modeling of laser-driven experiments aiming to demonstrate magnetic field amplification via turbulent dynamo*, Phys. Plasmas 24, 041404 (2017) [11th International Conference on High Energy Density Laboratory Astrophysics (HEDLA2016), 16-20/05/2016, Menlo Park (CA, USA)]

2018

[PUB-SI21] M.E. Dieckmann, D. Doria, G. Sarri, L. Romagnani, H. Ahmed, D. Folini, R. Walder, A. Bret and M. Borghesi, *Electrostatic shock waves in the laboratory and astrophysics: similarities and differences*, Plasma Phys. Control. Fusion 60, 014014 (2018) [44th EPS Conference on Plasma Physics (EPS-DPP2017), 26-30/06/2017, Belfast (UK)]

[PUB-SI22] L. Fedeli, A. Formenti, L. Cialfi, A. Sgattoni, G. Cantono and M. Passoni, *Structured targets for advanced laser-driven sources*, Plasma Phys. Control. Fusion 60, 014013 (2018) [44th EPS Conference on Plasma Physics (EPS-DPP2017), 26-30/06/2017, Belfast (UK)]

[PUB-SI23] S. Kraft, L. Obst, J. Metzkes-Ng, H.-P. Schlenvoigt, K. Zeil, S. Michaux, D. Chatain, J.-P. Perin, S.N. Chen, J. Fuchs, *M. Gauthier*, T.E. Cowan and U. Schramm, *First demonstration of multi-MeV proton acceleration from a cryogenic hydrogen ribbon*

target, Plasma Phys. Control. Fusion 60, 044010 (2018) [2017 international Laser and Plasma Accelerators Workshop (LPA2017), 27/08-01/09/2017, Jeju island (Korea)]

[PUB-SI24] D. Kraus, N.J. Hartley, S. Frydruch, A.K. Schuster, K. Rohartsch, M. Rodel, T.E. Cowan, S. Brown, E. Cunningham, T. van Driel, L.B. Fletcher, E. Galtier, E.J. Gamboa, A.L. Garcia, D.O. Gericke, E. Granados, P.A. Heimann, H.J. Lee, M.J. MacDonald, A.J. MacKinnon, E.E. McBride, I. Nam, P. Neumayer, A. Pak, A. Pelka, I. Prencipe, A. Ravasio, R. Redmer, A.M. Saunders, M. Scholmerich, M. Schorner, P. Sun, S.J. Turner, A. Zettl, R.W. Falcone, S.H. Glenzer, T. Doppner and J. Vorberger, *High-pressure chemistry of hydrocarbons relevant to planetary interiors and inertial confinement fusion*, Phys. Plasmas 25, 056313 (2018) [59th annual meeting of the APS Division of Plasma Physics, 23-27/10.2017, Milwaukee (WI, USA)]

[PUB-SI25] C. Neuville, K. Glize, P. Loiseau, P.-E. Masson-Laborde, A. Debayle, M. Casanova, C. Baccou, C. Labaune and S. Depierreux, *Inhibition of Crossed-Beam Energy Transfer induced by expansion-velocity fluctuations*, Plasma Phys. Control. Fusion 60, 044006 (2018) [47th annual Anomalous Absorption conference, 11-16/06/2017, Florence (USA)]

[PUB-SI26] J.J. Santos, M. Bailly-Grandvaux, M. Ehret, A.V. Arefiev, D. Batani, F.N. Beg, A. Calisti, S. Ferri, R. Florido, P. Forestier-Colleoni, S. Fujioka, M.A. Gigosos, L. Giuffrida, L. Gremillet, J.J. Honrubia, S. Kojima, P. Korneev, K.F.F. Law, J.-R. Marquès, A. Morace, C. Mossé, O. Peyrusse, S. Rose, M. Roth, S. Sakata, G. Schaumann, F. Suzuki-Vidal, V. Tikhonchuk, T. Toncian, N. Woolsey and Z. Zhang, *Laser-driven strong magnetostatic fields with applications to charged beam transport and magnetized high-energy-density physics*, Phys. Plasmas 25, 056705 (2018) [59th annual meeting of the APS Division of Plasma Physics, 23-27/10.2017, Milwaukee (WI, USA)]

[PUB-SI27] S. Sebban, A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, J. Nejdl, M. Kozlova, G. Maynard, J.-P. Goddet, A. Tafzi, A. Lifschitz, H.T. Kim, S. Jacquemot, P. Rousseau, Ph. Zeitoun and A. Rousse, *Toward compact and ultra-intense laser-based soft x-ray lasers*, Plasma Phys. Control. Fusion 60, 014030 (2018) [44th EPS Conference on Plasma Physics (EPS-DPP2017), 26-30/06/2017, Belfast (UK)]

Other proceedings [ACT]

2013

[ACT1] B. Albertazzi, P. Antici, J. Bocker, M. Borghesi, S. Chen, V. Dervieux, E. d'Humières, L. Lancia, M. Nakatsutsumi, R. Shepherd, L. Romagnani, Y. Sentoku, M. Swantusch, O. Willi, H. Pépin and J. Fuchs, *Longitudinal proton probing of ultrafast and high-contrast laser-solid interactions*, EPJ Web Conf. 59, 17014 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT2] K. Bennadji, F. Rosmej and V.S. Lisitsa, *Free-bound electron exchange contribution to l-split atomic structure in dense plasmas*, EPJ Web Conf. 59, 14002 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT3] A.-C. Bourgaux, S. Bastiani-Ceccotti, J.-R. Marquès, T. Vinci, A. Levy, P.-M. Leguay, F. Dorchies, H.-K. Chung, R. Marjoribanks and P. Audebert, *Spectroscopie X de couches L et M de plasmas hors équilibre thermodynamique local de niobium, tantale et tungstène*, in *UVX2012* (EDP Sciences online http://dx.doi.org/10.1051/uvx/201301006) 01006 (2013) [11ème colloque sur les sources cohérentes et incohérentes UV, VUV, et X: applications et développements récents (UVX2012), 12-15/06/2012, Biarritz (France)]

[ACT4] J.-C. Chanteloup and A. Lucianetti, *Active mirror amplifiers for HiPER kiloJoule beamlines*, EPJ Web Conf. 59, 08002 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT5] J.-C. Chanteloup, *HiPER, the European approach to Inertial Fusion Energy: laser driver studies*, CLEO:2013 OSA technical digest ATh3O.4 (2013) [CLEO: Applications and Technology (CLEO2013), 9-14/06/2013, San José (USA)]

[ACT6] C. Edwards and F. Amiranoff, *HiPER: the European path to laser energy*, EPJ Web Conf. 59, 01006 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT7] F. Friebel, S., Ricaud, A. Pellegrina, M. Hanna, E. Mottay, P. Camy, J.-L. Doualan, R. Moncorge, P. Georges, F. Druon and D.N. Papadopoulos, *High energy and broadband Yb:CaF2 multipass amplifier using passive coherent combining*, http://ieeexplore.ieee.org/document/6800601/ [2013 conference on Lasers & Electro-Optics Europe & International Quantum Electronics Conference (CLEO-Europe/IQEC2013), 12-16/05/2013, Munich (Germany)]

[ACT8] E. Galtier, O. Renner, E. Krousky and F. Rosmej, *HIDEX: a new high resolution x-ray spectrometer for detailed line profile measurements*, EPJ Web Conf. 59, 13002 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT9] P. Georges, D.N. Papadopoulos, L.P. Ramirez, F. Friebel, A. Pellegrina and F. Druon, *Ultra-broadband front-end laser development for the APOLLON 10PW laser*, CLEO:2013 OSA technical digest CTu2D.5 (2013) [CLEO: Science and Innovations (CLEO2013), 9-14/06/2013, San José (USA)]

[ACT10] D. Gilles, S. Turck-Chièze, M. Busquet, F. Thais, G. Loisel, L. Piau, J.E. Ducret, T. Blenski, M. Poirier, C. Blancard, P. Cossé, G. Faussurier, F. Gilleron, J.-C. Pain, J.A. Guzik,

D.P. Kilcrease, N.H. Magee, J. Harris, S. Bastiani-Ceccotti, F. Delahaye and C.J. Zeippen, Interaction of configuration in spectral opacity calculations for stellar physics, EAS Pub. Ser. 58, 51 (2013) [European Conference on Laboratory Astrophysics (ECLA), 26-30/09/2011, Paris (France)]

[ACT11] D. Gilles, S. Turck-Chièze, M. Busquet, F. Thais, G. Loisel, L. Piau, J.-E. Ducret, T. Blenski, C. Blancard, P. Cosse, G. Faussurier, F. Gilleron, J.-C. Pain, Q. Porcherot, J.A. Guzik, D.P. Kilcrease, N.H. Magee, J. Harris, S. Bastiani-Ceccotti, F. Delahaye and C.J. Zeippen, *Iron and nickel spectral opacity calculations in conditions relevant for pulsating stellar envelopes and experiments*, EPJ Web Conf. 59, 14003 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT12] T. Gonçalves-Novo, B. Vincent and J.-C. Chanteloup, *From 10 to 30 joules with the Lucia laser system: update on current performance and cryogenic amplifier development*, ASSL:2013 OSA technical digest ATu3A.19 (2013) [Advanced Solid State Lasers 2013, 27 October–1 November 2013, Paris (France)]

[ACT13] C. Goyon, S. Depierreux, D.T. Michel, G. Loisel, V. Yahia, P.-E. Masson-Laborde, P. Loiseau, S. Hüller, N.G. Borisenko, A. Orekhov, O. Rosmej, P. Nicolaï, V.T. Tikhonchuk and C. Labaune, *Laser-plasma interaction physics for shock ignition*, EPJ Web Conf. 59, 05006 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT14] O. Klimo, V.T. Tikhonchuk, X. Ribeyre, G. Schurtz, C. Riconda, S. Weber and J. Limpouch, *Laser plasma physics in shock ignition – transition from collisional to collisionless absorption*, EPJ Web Conf. 59, 05008 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT15] M. Labadens, D. Pomarede, D. Chapon, R. Teyssier, F. Bournaud, F. Renaud and N. Grandjouan, *Volume rendering of AMR simulations*, ASP Conf. Ser. 474, 287 (2013) [7th Annual International Conference on Numerical Modeling of Space Plasma Flow, 25-29/06/2012, Hawai (HI, USA)]

[ACT16] O. Larroche, R. Liska, O. Renner and E. Dalimier, *Modeling of ion deceleration in interpenetrating laser-generated plasma plumes*, EPJ Web Conf. 59, 05017 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT17] B. Le Garrec, V. Cardinali and G. Bourdet, *Thermo-optical measurements of ytterbium doped ceramics (Sc2O3, Y(2)0(3), Lu(2)0(3), YAG) and crystals (YAG, CaF2) at cryogenic temperatures*, SPIE Proc. 8780, 87800E (2013) [SPIE Optics+Optoelectronics 2013, 15-17/04/2013, Prague (Czech Republic)]

[ACT18] P.M. Leguay, B. Chimier, P. Combis, F. Deneuville, D. Descamps, C. Fourment, C. Goyon, M. Harmand, S. Hulin, A. Lévy, S. Petit, O. Peyrusse, P. Renaudin, J.J. Santos and F. Dorchies, *Dynamique ultra-rapide de la transition de phase solide-liquide-vapeur par spectroscopie XANES résolue en temps*, in *UVX2012* (EDP Sciences online http://dx.doi.org/10.1051/uvx/201301005) 01005 (2013)

[ACT19] P.-E. Masson-Laborde, S. Depierreux, D.T. Michel, S. Hüller, D. Pesme, J. Robiche, P. Loiseau, V.T. Tikhonchuk, C. Stenz, P. Nicolaï, M. Casanova, D. Teychenné, D. Marion, C. Goyon, V. Yahia, C. Riconda, N.G. Borisenko, W. Nazarov, R. Wrobel and C. Labaune,

Laser plasma interaction physics on the LIL facility, EPJ Web Conf. 59, 05003 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT20] L. Meignien, J.-P. Zou, E. Brambrink and P. Audebert, *Fiber based modulator systems at 1053 nm for shaped long pulse on LULI2000*, http://ieeexplore.ieee.org/document/6800664/ [2013 conference on Lasers & Electro-Optics Europe & International Quantum Electronics Conference (CLEO-Europe/IQEC2013), 12-16/05/2013, Munich (Germany)]

[ACT21] A. Moinard, F. Petitdemange, J. Larour and F.B. Rosmej, *Spaced resolved analysis of suprathermal electrons in dense plasma*, EPJ Web Conf. 59, 13003 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT22] T. Morita, Y. Sakawa, Y. Kuramitsu, T. Ide, K. Nishio, M. Kuwada, H. Ide, K. Tsubouchi, H. Yoneda, A. Nishida, T. Namiki, T. Norimatsu, K. Tomita, K. Nakayama, K. Inoue, K. Uchino, M. Nakatsutsumi, A. Pelka, M. Koenig, Q. Dong, D. Yuan, G. Gregori and K.A. Tanaka, *High Mach-number collisionless shock driven by a laser with an external magnetic field*, EPJ Web Conf. 59, 15004 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT23] K. Nishio, Y. Sakawa, Y. Kuramitsu, T. Morita, T. Ide, M. Kuwada, M. Koga, T. Kato, T. Norimatsu, C. Gregory, N. Woolsey, C. Murphy, G. Gregori, K. Schaar, A. Dizière, M. Koenig, A. Pelka, S. Wang, Q. Dong, Y. Li and H. Takabe, *Laboratory experiments on plamsa jets in a magnetic field using high-power lasers*, EPJ Web Conf. 59, 15005 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT24] M. Poirier, P. Arnault, S. Bastiani-Ceccotti, T. Blenski, F. de Gaufridy de Dortan, F. Gilleron, G. Loisel, J.-C. Pain, Q. Porcherot, C. Reverdin, V. Silvert, F. Thais and S. Turck-Chièze, *Theoretical interpretaion for 2p-nd absorption spectra of iron, nickel and copper in X-ray range measured at the LULI2000 facility*, EPJ Web Conf. 59, 14001 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT25] C. Riconda, S. Weber, O. Klimo, A. Héron and V.T. Tikhonchuk, *Multi-dimensional PIC-simulations of parametric instabilities for shock-ignition conditions*, EPJ Web Conf. 59, 05007 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT26] C. Riconda, S. Weber, J. Fuchs, L. Lancia, J.-R. Marquès and G. Mourou, *Kinetic simulations of intense light pulses generated by Brillouin backscattering in laser-plasma interaction*, Proc. SPIE 8779, 877921 (2013) [SPIE Optics+Optoelectronics 2013, 15-17/04/2013, Prague (Czech Republic)]

[ACT27] F.B. Rosmej, A. Escarguel, T. Lefevre and R. Stamm, *Non-equilibrium radiative properties of fluctuating Helium plasmas*, ECA 37D, P5.188 (2013) [40th EPS conference on Plasma Physics (EPS-DPP2013), 1-5/07/2013, Espoo (Finland)]

[ACT28] Y. Sakawa, Y. Kuramisu, T. Morita, T. Kato, H. Tanji, T. Ide, K. Nishio, M. Kuwada, T. Tsubouchi, H. Ide, T. Norimatsu, C. Gregory, N. Woolsey, K. Schaar, C. Murphy, G. Gregori, A. Dizière, A. Pelka, M. Koenig, S. Wang, Q. Dong, Y. Li, H.-S. Park, S. Ross,

N. Kugland, D. Ryutov, B. Remington, A. Spitkovsky, D. Froula and H. Takabe, *High-power laser experiments to study collisonless shock generation*, EPJ Web Conf. 59, 15001 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

[ACT29] A. Sgattoni, A. Bigongiari, T. Ceccotti, V. Floquet, O. Klimo and A. Macchi, *Enhanced laser coupling and proton acceleration in grating targets by surface wave excitation in the relativistic regime*, ECA 37D, O5.209 (2013) [40th EPS conference on Plasma Physics (EPS-DPP2013), 1-5/07/2013, Espoo (Finland)]

[ACT30] A. Sgattoni, T. Ceccotti, V. Floquet, A. Bigongiari, M. Raynaud, C. Riconda, F. Baffigi, L. Labate, L. A. Gizzi, L. Vassura, J. Fuchs, O. Klimo, M. Kveton, F. Novotny, M. Possolt, J. Prokupek, J. Proska, J. Psikal, L. Stolcova, A. Velyhan, M. Bougeard, P. Martin, I. Prencipe, A. Zani, D. Dellasega, A. Macchi and M. Passoni, *Laser plasma proton acceleration experiments using foam-covered and grating targets*, Proc. SPIE 8779, 87790L (2013) [SPIE Optics+Optoelectronics 2013, 15-17/04/2013, Prague (Czech Republic)]

[ACT31] V. Yahia, S. Depierreux, C. Goyon, G. Loisel, N.G. Borisenko, P.-E. Masson-Laborde, A. Orekhov, T. Rienecker, O. Rosmej and C. Labaune, *Effects of hydrodynamics on Stimulated Brillouin Scattering in multiple plasma interaction*, EPJ Web Conf. 59, 05004 (2013) [7th international conference on Inertial Fusion Sciences and Applications (IFSA2011), 12-16/09/2011, Bordeaux (France)]

2014

[ACT32] D. Batani, M. Koenig, J.-L. Miquel, J.-E. Ducret, E. d'Humieres, S. Hulin, J. Caron, J.-L. Feugeas, P. Nicolai, V. Tikhonchuk, L. Serani, N. Blanchot, D. Raffestin, I. Thfoin Lantuejoul, B. Rosse, C. Reverdin, A. Duval, F. Laniesse, A. Chance, D. Dubreuil, B. Gastineau, J.-C. Guillard, F. Harrault, D. Leboeuf, J.-M. Le Ster, C. Pes, J.-C. Toussaint, X. Leboeuf, L. Lecherbourg, C.I. Szabo, J.-L. Dubois and F. Lubrano-Lavaderci, *Development of the PETawatt Aquitaine Laser system and new perspectives in physics*, Physica Scripta T161, 014016 (2014) [International Conference on Research and Applications of Plasmas (PLASMA2013), 02-06/09/2013, Warsaw (Poland)]

[ACT33] A. Benuzzi-Mounaix, S. Mazevet, A. Ravasio, T. Vinci, A. Denoeud, M. Koenig, N. Amadou, E. Brambrink, F. Festa, A. Levy, M. Harmand, S. Brygoo, G. Huser, V. Recoules, J. Bouchet, G. Morard, F. Guyot, T. de Resseguier, K. Myanishi, N. Ozaki, F. Dorchies, J. Gaudin, P.-M. Leguay, O. Peyrusse, O. Henry, D. Raffestin, S. Le Pape, R. Smith and R. Musella, *Progress in warm dense matter study with applications to planetology*, Physica Scripta T161, 014060 (2014) [International Conference on Research and Applications of Plasmas (PLASMA2013), 02-06/09/2013, Warsaw (Poland)]

[ACT34] T. Goncalves-Novo, S. Marrazzo, B. Vincent and J.-C. Chanteloup, *Low temperature active mirror Yb:YAG laser amplifier gain studies*, CLEO:2014 OSA technical digest SM1F.2 (2014) [Conference on Lasers and Electro-Optics: Science & Innovations (CLEO/SI), 08-13/06/2014, San Jose, CA (USA)]

[ACT35] A. Hervy, L. Gallais, D. Mouricaud, G. Chériaux, O. Uteza, R. Clady, M. Sentis and A. Fréneaux, Thin films characterizations to design high-reflective coatings for ultrafast high power laser systems, SPIE Proc. 9237, 92370J (2014) [46th annual symposium on

optical materials for high power lasers (SPIE Laser Damage 2014), 14-17/09/2014, Boulder (USA)]

[ACT36] E. Oks, E. Dalimier, A. Faenov and O. Renner, *Review of the phenomenon of dips in spectral lines emitted from plasmas and their applications*, J. Phys. Conf. Ser. 548, 012030 (2014) [22nd international conference on spectral line shapes (ICSLS2014), 01-06/06/2014, Tullahoma (USA)]

[ACT37] M. Smid, O. Renner, F.B. Rosmej and D. Khaghani, *Investigation of x-ray emission induced by hot electrons in dense Cu plasmas*, Physica Scripta T161, 014020 (2014) [International Conference on Research and Applications of Plasmas (PLASMA2013), 02-06/09/2013, Warsaw (Poland)]

2015

[ACT38] E.O. Baronova, J. Larour, F.B. Rosmej and F.Y. Khattak, *Polarization analysis of CuXX-lines emitted from X-pinch*, J. Phys. Conf. Ser. 653, 012145 (2015) [30th International Conference on Interaction of Intense Energy Fluxes with Matter (IIEFM2015), 01-06/03/2015, Elbrus, Kabardino-Balkaria (Russia)]

[ACT39] L. Blanco, N. Vedrenne, V. Michau, L. M. Mugnier and G. Cheriaux, *Adaptive Laser Beam Shaping with a Linearized Transport-of-Intensity Equation*, CLEO:2015 OSA technical digest STu2N.4 (2015) [Conference on Lasers and Electro-Optics: Science and Innovations (CLEO/SI), 10-15/05/2015, San Jose, CA (USA)]

[ACT40] E. d'Humieres, S. Chen, M. Lobet, M. Sciscio, P. Antici, M. Bailly-Grandvaux, T. Gangolf, G. Revet, J. Santos, A.M. Schroer, O. Willi, V. Tikhonchuk, H. Pepin and J. Fuchs, *Longitudinal laser ion acceleration in low density targets: experimental optimization on the Titan laser facility and numerical investigation of the ultra-high intensity limit*, SPIE Proc. 9514, 95140b (2015) [Conference on Laser Acceleration of Electrons, Protons, and Ions III & Medical Applications of Laser-Generated Beams of Particles III, 13-15/04/2015, Prague (Czech Republic)]

[ACT41] A. Hervy, A. Dussourd, G. Chaussat, D. Mouricaud, G. Cheriaux, L. Gallais and R. Geyl, *Polishing and coating of a F1250mm 90 degrees off-axis parabola for PW lasers*, SPIE Proc. 9627, 962719 (2015) [Conference on Optical Systems Design - Advances in Optical Thin Films V, 07-10/09/2015, Jena (Germany)]

[ACT42] H. Jacqmin, A. Jullien, B. Mercier, M. Hanna, F. Druon, D. Papadopoulos and R. Lopez-Martens, *Passive coherent combining of CEP-stable few-cycles pulses from a temporally divided hollow fiber compressor*, CLEO:2015 OSA technical digest SM2P.3 (2015) [Conference on Lasers and Electro-Optics: Science and Innovations (CLEO/SI), 10-15/05/2015, San Jose, CA (USA)]

[ACT43] S. Kisyov, F. Negoita, M.M. Gugiu, D.P. Higginson, L. Vassura, M. Borghesi, L. Bernstein, D.L. Bleuel, F. Gobet, B.L. Goldblum, A. Green, F. Hannachi, S. Kar, H. Petrascu, D. Pietreanu, L. Quentin, A.M. Schroer, M. Tarisien, M. Versteegen, O. Willi, P. Antici and J. Fuchs, *Time of Flight Measurements for Neutrons Produced in Reactions Driven by Laser-Target Interactions at Petawatt level*, Phys. Procedia 77, 29 (2015) [International Conference on Laser Applications at Accelerators (LA3NET) 2015, 25-27/03/2015, Mallorca (Spain)]

[ACT44] F. Negoita, M. Gugiu, H. Petrascu, C. Petrone, D. Pietreanu, J. Fuchs, S. Chen, D. Higginson, L. Vassura, F. Hannachi, M. Tarisien, M. Versteegen, P. Antici, D. Balabanski, S. Balascuta, M. Cernaianu, I. Dancus, S. Gales, L. Neagu, C. Petcu, M. Risca, M. Toma, E. Turcu and D. Ursescu, *Perspectives for neutron and gamma spectroscopy in high power laser driven experiments at ELI-NP*, AIP Conf. Proc. 1645, 228 (2015) [Carpathian Summer School of Physics, 13-26/07/2014, Sinaia (Romania)]

[ACT45] O. Renner, M. Smid, D. Batani, L. Antonelli, F. Barbato and F.B. Rosmej, *X-ray spectroscopic diagnosis of hot electron production in laser-irradiated Cu targets*, ECA 39E, P4.216 (2015) [42nd European Physical Society Conference on Plasma Physics, 22-26/06/2015, Lisbon (Portugal)]

[ACT46] C. Reverdin, L. Lecherbourg, V. Dervieux, D. Gontier, B. Loupias and S. Baton, Hardened x-ray crystal spectrometer, Proc. Science ECPD2015, 42 (2015) [2nd European conference on Plasma Diagnostics (ECPD2015), 14-17/04/2015, Frascati (Italy)]

[ACT47] S. Sebban, A. Depresseux, J. Gautier, F. Tissandier, A. Lifschitz, H.T. Kim, P. Zeitoun, G. Maynard, J. Nejdl, M. Kozlova and S. Jacquemot, Femtosecond soft x-ray laser by temporal ionization gating, in ICOPS2015 Proc. [42nd IEEE International Conference on Plasma Sciences (ICOPS) 24-28/05/2015, Belek (Turkey)]

[ACT48] N. Vedrenne, F. Cassaing, L.M. Mugnier, V. Michau, G. Iaquaniello, L. Blanco and G. Chériaux, *Design and performance of an integrated phase and amplitude diversity sensor*, CLEO:2015 OSA technical digest STu2N.2 (2015) [Conference on Lasers and Electro-Optics: Science and Innovations (CLEO/SI), 10-15/05/2015, San Jose, CA (USA)]

2016

[ACT49] M. Antier, J. Le Dortz, J. Bourderionnet, C. Larat, R. Lallier, L. Daniault, I. Fsaifes, A. Heilmann, S. Bellanger, C. Simon-Boisson, J.-C. Chanteloup and A. Brignon, *XCAN project: coherent beam combining of large number fibers in femtosecond regime*, SPIE Proc. 9992, 99920B(2016) [Conference on Emerging Imaging and Sensing Technologies, 28-29/09/2016, Edinburgh, Scotland (UK)]

[ACT50] A.-C. Bourgaux, S. Bastiani-Ceccotti, P. Audebert, J.-R. Marquès, L. Vassura, T. Vinci, F. Dorchies, P.-M. Leguay, H.-K. Chung, C. Bowen, V. Dervieux, P. Renaudin, V. Silvert and S. Jacquemot, *X-ray emission spectroscopy of well-characterized non-LTE plasmas*, J. Phys. Conf. Ser. 688, 012039 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT51] F. Condamine, M. Šmíd, O. Renner, M. Dozières, F. Thais, P. Angelo, J.-L. Bobin and F.B. Rosmej, *Suprathermal electrons in kJ-laser produced plasmas: M-shell resolved high-resolution X-ray spectroscopic study of transient matter evolution*, J. Phys. Conf. Ser. 717, 012060 (2016) [9th international conference on Inertial Fusion and Scientific Applications (IFSA2015), 20-25/09/2015, Seattle (USA)]

[ACT52] F. Consoli, R. De Angelis, A. Bonasera, J. Sura, P. Andreoli, G. Cristofari, M. Cipriani, G. Di Giorgio, F. Ingenito, M. Barbarino, C. Labaune, C. Baccou, S. Depierreux, C. Goyon and V. Yahia, *Study on a compact and adaptable Thomson Spectrometer for lser-initiated B-11(p, alpha)Be-8 reactions and low-medium energy particle detection*, J. Instrum. 11,

C05010 (2016) [7th Plasma Physics by Laser and Applications (PPLA2015), 5-7/10/2015, Frascati (Italy)]

[ACT53] E.D. Filippov, S.A. Pikuz, I.Yu. Skobelev, S.N. Ryazantsev, D.P. Higginson, D. Khagani, G. Revet, S.N. Chen and J. Fuchs, *Parameters of supersonic astrophysically-relevant plasma jets collimating via poloidal magnetic field measured by x-ray spectroscopy method*, J. Phys. Conf. Ser. 774, 012114 (2016) [31st international conference on Equations of State for Matter (ELBRUS2016), 01-06/03/2016, Elbrus (Russia)]

[ACT54] H. Habara, S. Nakaguchi, Y. Uematsu, S.D. Baton, S.N. Chen, J. Fuchs, T. Iwawaki, M. MacDonald, W. Nazarov, C. Rousseaux and K.A. Tanaka, *Propagation of intense short-pulse laser in homogeneous near-critical density plasmas*, J. Phys. Conf. Ser. 717, 012019 (2016) [9th international conference on Inertial Fusion and Scientific Applications (IFSA2015), 20-25/09/2015, Seattle (USA)]

[ACT55] T. Ishikawa, Y. Sakawa, T. Morita, Y. Yamaura, Y. Kuramitsu, T. Moritaka, T. Sano, R. Shimoda, K. Tomita, K. Uchino, S. Matsukiyo, A. Mizuta, N. Ohnishi, R. Crowston, N. Woolsey, H. Doyle, G. Gregori, M. Koenig, C. Michaut, A. Pelka, D. Yuan, Y. Li, K. Zhang, J. Zhong, F. Wang and H. Takabe, *Thomson scattering measurements of a collimated plasma jet generated by a high-power laser system*, J. Phys. Conf. Ser. 688, 012039 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT56] Y. Kuramitsu, S. Matsukiyo, S. Isayama, D. Harada, T. Oyama, R. Fujino, Y. Sakawa, T. Morita, Y. Yamaura, T. Ishikawa, T. Moritaka, T. Sano, K. Tomita, R. Shimoda, Y. Sato, K. Uchino, A. Pelka, R. Crowston, N. Woolsey, G. Gregori, M. Koenig, D.W. Yuan, C.L. Yin, Y.T. Li, K. Zhang, J.Y. Zhong, F.L. Wang, N. Ohnishi, K. Nagamine, H. Yoneda and H. Takabe, *Spherical shock in the presence of an external magnetic field*, J. Phys. Conf. Ser. 688, 012056 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT57] J. Le Dortz, M. Antier, J. Bourderionnet, C. Larat, A. Heilmann, I. Fsaifes, L. Daniault, S. Bellanger, C. Simon-Boisson, J.-C. Chanteloup, E. Lallier and A. Brignon, *Coherent beam combining of 19 fibers in femtosecond regime*, CLEO:2016 OSA technical digest Stu1M.1 (2016) [Conference on Lasers and Electro-Optics (CLEO), 5-10/06/2016, San Jose, CA (USA)]

[ACT58] M. Lobet, E. d'Humières, M. Grech, C. Ruyer, X. Davoine and L. Gremillet, *Modeling of radiative and quantum electrodynamics effects in PIC simulations of ultra-relativistic laser-plasma interaction*, J. Phys. Conf. Ser. 688, 012058 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT59] P. Loiseau, A. Castan, J.-R. Marquès, L. Lancia, T. Gangolf, J. Fuchs, P.-E. Masson-Laborde, D. Teychenne, A. Debayle, M.-C. Monteil, M. Casanova, C. Rousseaux, S. Lemaire and D. Riz, *High-power laser-plasma interaction in nanosecond regimes 'at a glance' using proton deflectometry*, J. Phys. Conf. Ser. 717, 012036 (2015) [9th International Conference on Inertial Fusion Sciences and Applications (IFSA), 20-25/09/2015, Seattle, WA (USA)]

[ACT60] T. Morita, N.L. Kugland, W. Wan, R. Crowston, R.P. Drake, F. Fiuza, G. Gregori, C. Huntington, T. Ishikawa, M. Koenig, C. Kuranz, M.C. Levy, D. Martinez, J. Meinecke, F. Miniati, C.D. Murphy, A. Pelka, C. Plechaty, R. Presura, N. Quiros, B.A. Remington,

B. Reville, J.S. Ross, D.D. Ryutov, Y. Sakawa, L. Steele, H. Takabe, Y. Yamaura, N. Woolsey and H.-S. Park, *Proton imaging of an electrostatic field structure formed in laser-produced counter-streaming plasmas*, J. Phys. Conf. Ser. 688, 012071 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT61] O. Renner, M. Smid, D. Khaghani and F.B. Rosmej, *K-shell spectroscopic diagnosis of suprathermal electrons at fusion-relevant environmental conditions*, J. Phys. Conf. Ser. 688, 012091 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT62] F.B. Rosmej, A. Moinard, O. Renner, E. Galtier, J.J. Lee, B. Nagler, P.A. Heimann, W. Schlotter, J.J. Turner, R.W. Lee, M. Makita, D. Riley and J. Seely, *XFEL resonant photo-pumping of dense plasmas and dynamic evolution of autoionizing core hole states*, J. Phys. Conf. Ser. 688, 012093 (2016) [8th international conference on Inertial Fusion and Scientific Applications (IFSA2013), 8-13/09/2013, Nara (Japan)]

[ACT63] C. Scullion, D. Doria, L. Romagnani, H. Ahmed, A. Alejo, O.C. Ettlinger, R.J. Gray, J. Green, G.S. Hicks, D. Jung, K. Naughton, H. Padda, K. Poder, G.G. Scott, D.R. Symes, S. Kar, P. McKenna, Z. Najmudin, D. Neely, M. Zepf and M. Borghesi, *Angularly resolved characterization of ion beams from laser-ultrathin foil interactions*, J. Instrum. 11, C09020 (2016) [4th international conference Frontiers in Diagnostic Technologies (ICFDT4), 30/03-1/04/2016, Frascati (Italy)]

2017

[ACT64] P. Colin-Lalu, V. Recoules, G. Salin and G. Huser, *Ab initio and experimental studies of glow-discharge polymer used in Laser MegaJoule capsule*, AIP Conf. Proc. 1793, 090005 (2017) [19th Biennial American-Physical-Society (APS) Conference on Shock Compression of Condensed Matter (SCCM), 14-19/06/2015, Tampa, Florida (USA)]

[ACT65] F.P. Condamine, M. Smid, O. Renner, M. Dozières, F. Thais, P. Angelo and F.B. Rosmej, *M-shell resolved high-resolution x-ray spectroscopic study of transient matter evolution driven by hot electrons in kJ-laser produced plasmas*, AIP Conference Proceedings 1811, 060001 (2017) [19th international conference on Atomic Processes in Plasmas (APiP2016), 4-8/04/2016, Paris (France)]

[ACT66] A. Dadonova, A. Devdariani, E. Dalimier and P. Angelo, *Bound-freetransitions in H + H$^-$ collisions*, J. Phys. Conf. Ser. 810, 012027 (2017) (23rd international conference on spectral line shapes (ICSLS2016), 19-24/06/2016, Torun (Poland)]

[ACT67] E. Dalimier, E. Oks and O. Renner, *Dips in spectral line profiles and their applications in plasma physics and atomic physics*, AIP Conference Proceedings 1811, 190003 (2017) [19th international conference on Atomic Processes in Plasmas (APiP2016), 4-8/04/2016, Paris (France)]

[ACT68] E. Dalimier, A.Ya. Faenov, E. Oks, P. Angelo, T. A. Pikuz, Y. Fukuda, A. Andreev, J. Koga, H. Sakaki, H. Kotaki, A. Pirozhkov, Y. Hayashi, I. Yu Skobelev, S. A. Pikuz, T. Kawachi, M. Kando, K. Kondo, A. Zhidkov, E. Tubman, N. M. H. Butler, R. J. Dance, M. A. Alkhimova, N. Booth, J. Green, C. Gregory, P. McKenna, N. Woolsey and R. Kodama, *X-ray spectroscopy of super-intense laser-produced plasmas for the study of nonlinear processes. Comparison with PIC simulations*, J. Phys. Conf. Ser. 810, 012004 (2017) (23rd

international conference on spectral line shpaes (ICSLS2016), 19-24/06/2016, Torun (Poland)]

[ACT69] B. Le Garrec, D.N. Papadopoulos, C. Le Blanc, J.-P. Zou, G. Chériaux, P. Georges, F. Druon, L. Martin, A. Fréneaux, A. Beluze, N. Lebas, F. Mathieu and P. Audebert, *Design update and recent results of the Apollon 10PW facility*, Proc. SPIE 10238, 102380Q (2017) [SPIE Conference on High-Power, High-Energy and High-Intensity Laser Technology III, 26-27/04/2017, Prague (Czech Republic)]

[ACT70] A. Macchi, C. Livi and A. Sgattoni, *Radiation pressure acceleration: perspectives and limits*, J. Instrumentation 12, C04016 (2017) [3rd ELIMED workshop, 7-10/09/2016, Catania (Italy)]

[ACT71] L. Manti, F.M. Perozziello, M. Borghesi, G. Candiano, P. Chaudhary, G.A.P. Cirrone, D. Doria, D. Gwynne, R. Leanza, K.M. Prise, L. Romagnani, F. Romani, V. Scuderi and A. Tramontana, *The radiobiology of laser-driven particle beams: focus on sub-lethal responses of normal human cells*, J. Instrumentation 12, C03084 (2017) [3rd ELIMED workshop, 7-10/09/2016, Catania (Italy)]

[ACT72] G. Milluzzo, V. Scuderi, A.G. Amico, M. Borghesi, G.A.P. Cirrone, G. Cuttone, M. De Napoli, D. Doria, J. Dostal, G. Larosa, R. Leanza, D. Margarone, G. Petringa, J. Pipek, L. Romagnani, F. Romano, F. Schillaci and A. Velyhan, *Laser-accelerated ion beam diagnostics with TOF detectors for the ELIMED beam line*, J. Instrumentation 12, C02025 (2017) [14th topical seminar on Innovative Particle and Radiation Detectors (IPRD16), 3-6/10/2016, Siena (Italy)]

[ACT73] F.B. Rosmej, D. Khaghani, M. Dozières, R. Dachicourt, M. Smid and O. Renner, *X-ray emission of exotic ions in dense plasmas*, AIP Conference Proc. 1811, 190012 (2017) [19th international conference on Atomic Processes in Plasmas (APiP2016), 4-8/04/2016, Paris (France)]

[ACT74] V. Scuderi, G. Milluzzo, A. alejo, A.G. Amico, N. Booth, G.A.P. Cirrone, D. Doria, J. Green, S. Kar, G. Larosa, R. Leanza, D. Margarone, P. McKenna, H. Padda, G. Petringa, J. Pipek, L. Romagnani, F. Romano, F. Schillaci, M. Borghesi, G. Cuttone and G. Korn, *Time of Flight based diagnotics for high energy laser driven ion beams*, J. Instrumentation 12, C03086 (2017) [3rd ELIMED workshop, 7-10/09/2016, Catania (Italy)]

[ACT75] S. Sebban, A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, J. Nejdl, M. Kozlova, G. Maynard, J.-P. Goddet, A. Tafzi, A. Lifschitz, H.T. Kim, S. Jacquemot, V. Malka, K. Ta Phuoc, C. Thaury, P. rousseau, G. Iaquaniello, T. Lefrou, A. Flacco, B. Vodungbo, G. Lambert, P. Zeitoun and A. Rousse, *Toward compact and ultra-intense laser based soft x-ray lasers,* CLEO:2017 OSA technical digest ATh3C.1 (2017) [Conference on Lasers and Electro-Optics (CLEO), Applications & Technology, 14-19/05/2017, San Jose, CA (USA)]

[ACT76] P.A. Walker, ..., A. Beluze, ..., J.-C. Chanteloup, ..., F. Mathieu, ..., D.N. Papadopoulos, ..., and A. Zigler, *Horizon 2020 EuPRAXIA design study*, J. Phys. Conf. Ser. 874, 012029 (2017) [8th international Particle Accelerator Conference (IPAC), 14-19/05/2017, Copenhagen (Denmark)]

2018

[ACT77] L. Antonelli, S. Atzeni, D. Batani, S.D. Baton, E. Brambrink, P. Forestier-Colleoni, M. Koenig, E. Le Bel, Y. Maheut, T. Nguyen-Bui, M. Richetta, C. Rouseaux, X. Ribeyre, A.

Schiavi and J. Trela, *X-ray absorption radiography for high pressure shock wave studies*, J. Instrumentation 13, C01013 (2018) [2nd European Conference on Plasma Diagnostics (ECPD2017), 18-21/04/2017, Bordeaux (France)]

[ACT78] C. Reverdin, S. Bastiani, D. Batani, E. Brambrink, G. Boutoux, A. Duval, S. Hulin, K. Jakubowska, M. Koenig, I. Lantuejoul-Thfoin, L. Lecherbourg, C.I. Szabo and B. Vauzour, *SPECTIX, a PETAL plus X-ray spectrometer: design, calibration and preliminary tests*, J. Instrumentation 13, C01005 (2018) [2nd European Conference on Plasma Diagnostics (ECPD2017), 18-21/04/2017, Bordeaux (France)]

Books and book chapters [BOOK]

2013

[BOOK1] J.-L. Bobin, *Prospective énergétique à l'horizon 2100: données, contraintes et scenarios*, EDP Sciences, InterSections ISBN : 2759808068 (2013)

[BOOK2] M. Hanna, D.N. Papadopoulos, L. Daniault, F. Druon, P. Georges and Y. Zaouter, *Coherent beam combining in the femtosecond regime*, in *Coherent Laser Beam Combining*, Wiley-VCH ISBN: 978-3-527-41150-4 (2013)

[BOOK3] F. Petitdemange and F.B. Rosmej, *Dielectronic satellites and Auger electron heating: irradiation of solid by intense XUV-Free Electron Laser radiation*, in *New Trends in Atomic and Molecular Physics, Advanced Technological Applications*, Springer ISBN: 978-3-642-38166-9 (2013)

2014

[BOOK4] J.-L. Bobin, *Controlled Thermonuclear fusion*, World Scientific ISBN: 978-981-4590-68-6 (2014)

2015

[BOOK5] J.-L. Bobin, *Demain, quelle Terre ? Dialogue sur l'environnement et la transition énergétique*, EDP Sciences, Bulles de sciences ISBN : 2759818101 (2015)

2016

[BOOK6] J.-L. Bobin, *Le Soleil sur Terre ?,* in *La lumière en lumière*, EDP Sciences ISBN : 978-2-7598-1829-7 (2016)

2018

[BOOK7] G. Belmont, L. Rezeau, C. Riconda and A. Zaslavsky, *Introduction à la physique des plasmas*, iSTE editions (to be published - 2018)

Editorials [ED]

2013

[ED1] V. Naulin and S. Jacquemot, *Preface*, Plasma Phys. Control. Fusion 55, 120301 (2013) [40th EPS conference on Plasma Physics (EPS-DPP2013), 1-5/07/2013, Espoo (Finland)]

2015

[ED2] S. Ratynskaia and S. Jacquemot, *Preface*, Plasma Phys. Control. Fusion 57, 010301 (2015) [41st European Physical Society Conference on Plasma, 22-26/06/2014, Berlin (Germany)]

2016

[ED3] R. Bingham and S. Jacquemot, *Preface EPS2015*, Plasma Phys. Control. Fusion 58, 010101 (2016) [42nd European Physical Society Conference on Plasma, 22-26/06/2015, Lisbon (Portugal)]

2017

[ED4] P. Mantica, R. Dendy and S. Jacquemot, *Editorial*, Plasma Phys. Control. Fusion 59, 010101 (2017) [43rd EPS Conference on Plasma Physics, 4-8/07/2016, Leuven (Belgium)]

Invited talks at international conferences [INV]

2013

[INV1] S. Baton, *Review on shock ignition experiments*, Laser Energy Workshop, SPIE Optics+Optoelectronics [15-18/04/2013, Prague (Czech Republic)]

[INV2] A. Benuzzi-Mounaix, *Planetology in laboratory: Progress in Warm Dense Study*, PLASMA2013 [2-6/09/2013, Warsaw (Poland)]

[INV3] J.-C. Chanteloup, *Experimental exploration of a cryogenically operated Yb:YAG laser prototype for inertial fusion laser programs*, Laser Energy Workshop, SPIE Optics+Optoelectronics [15-18/04/2013, Prague (Czech Republic)]

[INV4] M. Glesser, *Laser ion acceleration with low density targets: a new path towards high intensity, high energy ion beams*, Laser Acceleration of Electrons, Protons and Ions II, SPIE Optics+Optoelectronics [15-18/04/2013, Prague (Czech Republic)]

[INV5] A. Ravasio, *Structural investigation of SiO2 at extreme temperature and density conditions : experiment and simulations*, 40th EPS Conference on Plasma Physics (EPS-DPP2013) [01-05/07/2014, Espoo (Finland)]

[INV6] C. Riconda, *Light Pulses Amplification by Brillouin Backscattering in Laser Plasma Interaction*, 6th Conference on the Frontiers of Plasma Physics and Technology (FPPT2013) [04-08/03/2013, Gaborone (Botswana)]

[INV7] C. Riconda, *Kinetic simulations of intense light pulses generated by Brillouin backscattering in laser-plasma interaction*, Harnessing Relativisitic Plasma Waves as Novel Radiation Sources from Terahertz to X-rays and Beyond III, SPIE Optics+Optoelectronics [15-18/04/2013, Prague (Czech Republic)]

[INV8] F.B. Rosmej, *X-ray emission of exotic ions in dense plasmas*, 18th international conference on Atomic Processes in Plasmas (APiP2013) [07-10/10/2013, Auburn (AL, USA)]

2014

[INV9] P. Audebert, *High intensity laser facilities perspective*, 33rd European Conference on Laser Interaction with Matter (ECLIM2014) [31/08-05/08/2014, Paris (France)]

[INV10] S.D. Baton, *Experiments on shock ignition : what has been done*, 17th International Congress on Plasma Physics (ICPP2014) [15-19/09/2014, Lisbon (Portugal)]

[INV11] A. Benuzzi-Mounaix, *Investigation of SiO2 in the regime of the Warm Dense Matter : applications to the planetology*, 10th International Conference on High Energy Density Laboratory Astrophysics (HEDLA2014) [12-16/05/2014, Bordeaux (France)]

[INV12] A. Benuzzi-Mounaix, *Study of the Warm Dense Matter for planetology*, 33rd European Conference on Laser Interaction with Matter (ECLIM2014) [31/08-05/08/2014, Paris (France)]

[INV11] E. Brambrink, *Production and diagnostics of Warm Dense Matter*, 2014 DPG spring meeting [17-21/03/2014, Berlin (Germany)]

[INV13] J.-C. Chanteloup, *A low temperature diode pumped active mirror Yb:YAG amplifier head*, 1st international symposium on High Power Laser Science and Engineering (HPLSE2014) [16-19/03/2014, Suzhou (China)]

[INV14] J. Fuchs, *Toward ion acceleration at high-repetition rate in low-density targets*, Photonics North 2014 [28-30/05/2014, Montréal (Canada)]

[INV15] J. Fuchs, *Laboratory and numerical investigation of plasma phenomena in extreme astrophysical objects*, 1st international conference "Science of the future" [17-20/09/2014, St Petersburg (Russia)]

[INV16] C. Riconda, *Kinetic Simulations of Laser Plasma Interaction at High Intensities*, 41st EPS Conference on Plasma Physics (EPS-DPP2014) [23-27/06/2014, Berlin (Germany)]

[INV17] F. Rosmej, *A new role of atomic processes for conduction band electrons: sample damge induced by intense short pulse X-ray radiation*, 7th international conference on Energy, Materials and Nanotechnology (EMN Open 2014) [22-25/09/2014, Chengdu (China)]

[INV18] F. Rosmej, *Sample damage driven by conduction band electron heating – a new role of atomic processes induced by intense short pulse XUV and X-ray radiation*, 4th annual world congress of Nano Science and Technology (Nano-S&T2014) [29-31/10/2014, Qingdao (China)]

[INV19] F. Rosmej, *A new role of atomic elementary processes at the frontiers of solid matter heating by intense short pulse XUV and X-ray Free Electron Lasers*, 5th international seminar on Physics at EBITs and Advanced Research Light sources (PEARL2014) [02-05/05/2014, Shanghai (China)]

[INV20] J.-P. Zou*, Design and current progress of the APOLLON 10 PW project*, 3rd Advanced Lasers and Photon Sources (ALPS'14) [22-25/04/2014, Yokohama (Japan)]

[INV21] J.P Zou, *Optical component requirement for ultra-short and ultra-intense lasers*, 3rd Pacific-rim Laser Damage conference (PLD'14) [22-25/04/2014, Yokohama (Japan)]

[INV22] J.-P. Zou, *Design and current progress of the APOLLON 10PW project*, 1st international symposium on High Power Laser Science and Engineering (HPLSE2014) [16-19/03/2014, Suzhou (China)]

2015

[INV23] F. Amiranoff, *Overview and Perspectives of the Apollon Multi-PW Laser Facility,* ELI Beamline Scientific Challenges 2015 [19-22/10/2015, Dolní Brežany (Czech Republic)]

[INV24] P. Audebert, *Experimental program with the multi-PW laser of the Apollon facility in the CILEX centre*, 2nd European Advanced Accelerator Concepts Workshop (EAAC2015) [13-19/09/2015, Isola d'Elba (Italy)]

[INV25] S. Bastiani-Ceccotti, *Analysis of the X-ray emission from well-characterized, NLTE, mid- and high-Z laser-produced plasmas*, 2015 Joint ICTP-IAEA Advanced School and Workshop on Modern Methods in Plasma Spectroscopy [16-27/03/2015, Trieste (Italy)]

[INV26] A. Benuzzi-Mounaix, *Overview of dynamically compressed matter studies using laser-produced and free electron laser X-ray source*, Studies of Dynamically Compressed Matter with X-rays Workshop [16-17/02/2015, Grenoble (France)]

[INV27] J. Fuchs, *Laser particle acceleration for prospective diagnostic and therapeutic applications*, 5th international symposium on Topical Problems in Bio-Photonics (TPB-2015) [20-24/07/2015, Nizhny Novgorod (Russia)]

[INV28] J. Fuchs, *Strong magnetization of laser-produced plasmas as a new tool for investigating for astrophysics and fusion physics*, 11th International Conference on Research in High Magnetic Fields (RHMF2015) [1-4/07/2015, Grenoble (France)]

[INV29] M. Grech, *Using Extreme Light to Drive Collisionless Shocks in ElectronPositron Plasmas*, International workshop "Nonlinear Photonics: theory, amterials, applications" (NPħ'15) [29/06-02/07/2015, St Petersburg (Russia)]

[INV30] M. Koenig, *Radiative hydrodynamic experiments and laboratory astrophysics*, 42nd EPS conference on Plasma Physics, (EPS-DPP2015) [22-26/06/2015, Lisbon (Portugal)]

[INV31] M. Koenig, *Accretion experiments related to cataclysmic variables*, 5th international conference on High Energy Density Physics (ICHED2015) [23-27/08/2015, San Diego (CA, USA)]

[INV32] F. Rosmej, X-*ray Free Electron Lasers: a new role of atomic elementary processes at the frontiers of solid matter heating and dense plasma physics*, 4th international Conference on "Current Developments in Atomic, Molecular, Optical and Nano Physics with application" (CDAMOP2015) [11-14/03/2015, Delhi (India)]

2016

[INV33] B. Albertazzi, *Dynamics of strongly Magnetized Laser-Produced plasmas of interest for the investigation of Astrophysical Jets*, 43rd EPS conference on Plasma Physics, (EPS-DPP2016) [04-08/07/2015, Leuven (Belgium)]

[INV34] J.-C. Chanteloup, *XCAN, a coherent amplification network of fs fiber lasers*, 2nd international symposium on High Power Laser Science and Engineering (HPLSE2016) [16-18/03/2016, Suzhou (China)]

[INV35] A. Denoeud, *Study of the Warm Dense Matter with XANES spectroscopy - Applications to planetary interiors*, APS March meeting 2016 [14-18/03/2016, Baltimore (MD, USA)]

[INV36] J. Fuchs, *Strong magnetization of laser-produced plasmas as a new tool for investigating astrophysics and fusion physics*, 6th international conference Frontiers of Nonlinear Physics (FNP2016) [17-23/07/2016, Nizhny Novgorod (Russia)]

[INV37] S. Jacquemot, *Inertial confinement fusion for energy: overview of the ongoing experimental, theoretical and numerical studies*, 26th IAEA Fusion Energy Conference [17-22/10/2016, Kyoto (Japan)]

[INV38] M. Koenig, *Accretion experiments related to cataclysmic variables*, 2016 Conference on High Intensity Lasers and attosecond science in Israel (CHLI2016) [22-24/02/2016, Tel-Aviv (Israel)]

[INV39] M. Koenig, *Accretion experiments related to cataclysmic variables*, 2nd international symposium on High Power Laser Science and Engineering (HPLSE2016) [16-18/03/2016, Suzhou (China)]

[INV40] M. Koenig, *Radiative shock interacting with solid obstacle experiments*, 3rd international symposium on High Energy Density Physics (ICHEDP2016) [23-36/09/2016, Shenzen (China)]

[INV41] D. Papadopoulos, *Recent progress on the APOLLON 10PW project*, 7th international conference of the International Committee on Ultrahigh Intensity Lasers (ICUIL2016) [11-16/09/2016, Montebello (Canada)]

[INV42] F. Rosmej, *An introduction to the interaction of X-ray Free Electron Laser radiation with matter*, 19th international conference on Atomic Processes in Plasmas (APiP2016) [04-08/04/2016, Paris (France)]

[INV43] F. Rosmej, *Interaction of Intense X-ray Free Electron Laser Radiation with Solid Density Matter*, 6th international seminar on Physics at EBITs and Advanced Research Light sources (PEARL2016) [10-13/06/2016, Shanghai (China)]

2017

[INV44] P. Audebert, *High pressure produced by laser: challenges and limitations*, 2nd workshop on "Studies of dynamically compressed matter with x-rays" [29-30/03/2017, Grenoble (France)]

[INV45] A. Benuzzi-Mounaix, *Results on laser compression experiments for warm dense matter study in the domain 1-10 Mbar*, 2nd workshop on "Studies of dynamically compressed matter with x-rays" [29-30/03/2017, Grenoble (France)]

[INV46] E. Brambrink, *Dynamic material response under high strain rates: phase transition dynamics*, 2nd workshop on "Studies of dynamically compressed matter with x-rays" [29-30/03/2017, Grenoble (France)]

[INV47] J. Fuchs, *High-power laser laboratory astrophysics: jet formation and mass accretion in young stars*, High-Energy Phenomena in Relativistic Outflows VI (HEPROVI) [11-15/09/2017, Moscow (Russia)]

[INV48] M. Grech, *From Quantum to Classical Radiation Reaction: a focus on stochasticity effects*, 26th annual international laser physics workshop (LPHYS'17) [17-21/07/2017, Kazan (Russia)]

[INV49] M. Grech, *From Quantum to Classical Radiation Reaction: a focus on stochasticity effects*, International Conference on Ultrafast Optical Science (UltrafastLight-2017) [03-05/10/2017, Moscow (Russia)]

[INV50] M. Koenig, *Recent radiative hydrodynamic experiment in Laboratory Astrophysics at LULI*, 1st AAPPS conference on Plasma Physics (AAPPS-DPP2017) [18-23/09/2017, Chengdu (China)]

[INV51] M. Koenig, *Overview of recent WDM experiments related to earth-like planets*, 6th international conference on High Energy Density Physics (ICHED2017) [05-09/06/2017, Wakayama (Japan)]

[INV52] B. Le Garrec, *Design update and recent results of the Apollon 10PW facility*, High-Power, High-Energy and High-Intensity Laser Technology, SPIE Optics+Optoelectronics [24-27/04/2017, Prague (Czech Republic)]

[INV53] A. Ravasio, *Planetology in laboratory: what we can do with laser experiments*, 8th Conference on the Frontiers of Plasma Physics and Technology (FPPT2017) [03-07/04/2013, Valparaiso (Chile)]

[INV54] J.-P. Zou, *Recent Advances of the Apollon 10 PW Laser*, 6th Advanced Lasers and Photon Sources (ALPS'17) [18-21/04/2017, Yokohama (Japan)]

2018

[INV55] J. Fuchs, *tbd*, Nuclear Photonics 2018 [24-29/06/2018, Brasov (Romania)]

[INV56] J. Fuchs, Ion acceleration by ultra-intense lasers beyond 10^{20} W/cm^2, 18th International Conference on Laser Optics (ICLO2018) [04-08/06/2018, S^t Petersburg (Russia)]

[INV57] M. Grech, *Overview of recent developments around the APOLLON 10PW laser*, 27th annual international Laser Physics workshop (LPHYS'18) [16-20/07/2018, Nottingham (UK)]

[INV58] M. Koenig, *Recent Laboratory Astrophysics hydrodynamic experiments at LULI*, 3rd international symposium on High Power Laser Science and Engineering (HPLSE2018) [9-13/04/2018, Suzhou (China)]

[INV59] M. Koenig, *tbd*, 2nd AAPPS conference on Plasma Physics (AAPPS-DPP) [12-17/11/2018, Kanazawa (Japan)]

[INV60] L. Lancia, *Plasma optics: ion gratings for energy transfer in the picosecond regime*, 45th EPS conference on Plasma Physics (EPS-DPP2018) [2-6/07/2018, Prague (Czech Republic)]

[INV61] D. Papadopoulos, *The APOLLON laser: current status and first commissioning results*, 3rd international symposium on High Power Laser Science and Engineering (HPLSE2018) [9-13/04/2018, Suzhou (China)]

[INV62] A. Ravasio, *tbd*, 16th international conference on the Physics of Non-ideal Plasmas (PNP2018) [24-28/09/2018, S^t Malo (France)]

[INV63] A. Ravasio, *Warm Dense Matter Studies relevant for planetary science*, 2nd AAPPS conference on Plasma Physics (AAPPS-DPP) [12-17/11/2018, Kanazawa (Japan)]

[INV64] G. Revet, *tbd*, 12th international conference on High Energy Density Laboratory Astrophysics (HEDLA2018) [27/05-01/06/2018, Kurashiki (Japan)]

[INV65] C. Riconda, *Plasma amplification in sc-SBS regime : recent progress in theory, simulation and experiment*, 3rd international symposium on High Power Laser Science and Engineering (HPLSE2018) [9-13/04/2018, Suzhou (China)]

[INV66] L. Romagnani, *Dynamics of the Electromagnetic Fields induced by Fast Electrons propagation in Near Solid-Density Media*, 2nd AAPPS conference on Plasma Physics (AAPPS-DPP) [12-17/11/2018, Kanazawa (Japan)]

PhD thesis [PHD]

2013

[PHD1] **Arzakantsyan Mikayel**, *Yb:YAG laser crystals with controlled doping distribution*, École Polytechnique (21/03/2013) - https://tel.archives-ouvertes.fr/pastel-00879616v1

[PHD2] **Festa Floriane**, *Etude de la structure électronique de l'aluminium en conditions extrêmes par spectroscopie d'absorption X*, École Polytechnique (05/04/2013) - https://tel.archives-ouvertes.fr/pastel-00904122v1

[PHD3] **Gauthier Maxence**, *Experimental study of ion stoping power in warm dense matter*, École Polytechnique (06/08/2013) - https://tel.archives-ouvertes.fr/pastel-00877875v1

2014

[PHD4] **Albertazzi Bruno**, *Plasmas laser et champs magnétiques*, École Polytechnique & INRS (10/01/2014) - https://tel.archives-ouvertes.fr/pastel-01001881v1

[PHD5] **Denoeud Adrien**, *Etude de la matière dense et tiède à l'aide de diagnostics X - Applications aux intérieurs planétaires*, École Polytechnique (24/11/2014) - https://tel.archives-ouvertes.fr/tel-01093197v1

[PHD6] **Goyon Clément**, *Etude de l'interaction d'un faisceau intense dans un plasma long et chaud dans le cadre du schéma d'allumage par choc*, École Polytechnique (29/04/2014) - https://tel.archives-ouvertes.fr/pastel-01061546v1

[PHD7] **Yahia Vincent**, *Etude expérimentale de la modification des instabilités paramétriques en plasmas multiples*, École Polytechnique (12/05/2014) - https://tel.archives-ouvertes.fr/pastel-01057855v1

2015

[PHD8] **Bourgaux Anne-Claire**, *Emission X de plasmas chauds hors équilibre thermodynamique local créés par laser*, École Polytechnique (15/10/2015) - https://tel.archives-ouvertes.fr/tel-01291542v1

[PHD9] **Dervieux Vincent**, *Caractérisation des plasmas chauds et denses produits par interaction laser à ultra-haute intensité sur une cible solide*, École Polytechnique (17/09/2015) - https://tel.archives-ouvertes.fr/tel-01205713v1

[PHD10] **Glize Kevin**, *Etude du comportemet collectif des speckles dans le développement de l'instabilité de diffusion Raman stimulée lors de l'interaction laser-plasma*, École Polytechnique (30/09/2015) - https://tel.archives-ouvertes.fr/tel-01226783v2

[PHD11] **Vassura Laura**, *Generation and characterization of short-duration and high-brightness laser-driven neutron sources*, École Polytechnique (04/12/2015) https://tel.archives-ouvertes.fr/tel-01781475

[PHD12] **Yurchak Roman**, *Etude numérique et expérimentale des phénomènes d'accrétion-éjection en astrophysique de laboratoire*, École Polytechnique (06/11/2015) - https://tel.archives-ouvertes.fr/tel-01338614v1

2016

[PHD13] **Baccou Claire**, *Initiation de réactions nucléaires par des protons accélérés par laser*, Université Paris-Saclay (27/06/2016) – https://tel.archives-ouvertes.fr/tel-01480939v1

[PHD14] **Castan Anais**, *Propagation laser en plasma sous-dense et modélisation de la déflectométrie protonique*, Université Paris-Saclay (29/01/2016) - https://tel.archives-ouvertes.fr/tel-01276694v1

[PHD15] **Chiaramello Marco**, *Laser Amplification via Stimulated Brillouin Scattering in the Strongly Coupled Regime: Towards Control and Optimization*, Université Pierre et Marie Curie – Paris VI (25/10/2016) https://tel.archives-ouvertes.fr/tel-01467094v1

[PHD16] **Colin-Lalu Pierre**, *Etude des équations d'état des matériaux ablateurs synthétisés pour les capsules du Laser MégaJoule*, Université Paris-Saclay (19/09/2016) - https://tel.archives-ouvertes.fr/tel-01663091v1

[PHD17] **Do Alexandre**, *Emission X de plasma: spectroscopie et imagerie à haute résolution*, Université Paris-Saclay (07/10/2016) - https://tel.archives-ouvertes.fr/tel-01492937v1

[PHD18] **Riquier Raphaël**, *Champs magnétiques dans les plasmas laser : transport électronique non-local et reconnexion*, Université Paris-Saclay (28/01/2016) - https://tel.archives-ouvertes.fr/tel-01355188v1

2017

[PHD19] **Bolis Riccardo**, *Etude des diagrammes de phase des systèmes MgO-SiO_2 à hautes pressions générées par choc laser*, Université Paris-Saclay (12/10/2017) - https://tel.archives-ouvertes.fr/tel-01683006v1

[PHD20] **Gangolf Thomas**, *Intense laser-plasma interactions with gaseous targets for energy transfer and particle acceleration*, École Polytechnique & Heinrich-Heine-Universität Düsseldorg (20/12/2017) - https://docserv.uni-duesseldorf.de/servlets/DerivateServlet/Derivate-48125/tgangolf-thesis-de.pdf

[PHD21] **Grassi Anna**, *Chocs non-collisonnels dans le cadre de l'astrophysique de laboratoire*, Université Pierre et Marie Curie – Paris VI (26/10/2017) - https://tel.archives-ouvertes.fr/tel-01793040

[PHD22] **Neuville Cédric**, *Etude expérimentale des effets multi-faisceaux sur l'instabilité de diffusion Brillouin stimulée*, Université Paris-Saclay (16/10/2017) - https://tel.archives-ouvertes.fr/tel-01663091v1