

Publications M.-C. Schanne-Klein (09/2019)

[Monitoring dynamic collagen reorganization during skin stretching with fast polarization-resolved SHG imaging](#)

G. Ducourthial, J.-S. Affagard, M. Schmeltz, X. Solinas, M. Lopez-Poncelas, C. Bonod-Bidaud, R. Rubio-Amador, F. Ruggiero, J.-M. Allain, E. Beaurepaire, M.-C. Schanne-Klein
J. Biophot. **12**, e201800336 (2019) doi.org/10.1002/jbio.201800336 - Editor's choice

[High-speed polarization-resolved third harmonic microscopy](#)

J. Morizet, G. Ducourthial, W. Supatto, A. Boutillon, R. Legouis, M.-C. Schanne Klein, C. Stringari, E. Beaurepaire,

Optica **6**, 385-388 (2019) doi: 10.1364/OPTICA.6.000385

Highlighted in Nature Photonics: Fast polarization sensitivity, R. Won, **Nat. Phot.** **13**, 303 (2019)

[Elimination of imaging artifacts in Second Harmonic Generation Microscopy using interferometry](#)

M. Pinsard, M. Schmeltz, J. van den Kolk, S. Patten, H. Ibrahim, L. Ramunno, M.-C. Schanne-Klein, and F. Légaré

Biomed. Opt. Express **10**, 3938-3952 (2019). Doi: 10.1364/BOE.10.003938

[Implementation of artifact-free Circular Dichroism SHG imaging of collagen](#)

M. Schmeltz, C. Teulon, G. Latour, D. Ghoubay, V. Borderie, C. Aimé, and M.-C. Schanne-Klein

Opt. Express **27**, 22685-22699 (2019). <https://doi.org/10.1364/OE.27.022685> Editor's Pick

[Combination of Traction Assays and Multiphoton Imaging to Quantify Skin Biomechanics \(book chapter\)](#)

S. Bancelin, B. Lynch, Christelle Bonod-Bidaud, P. Dokladal, F. Ruggiero, J.-M. Allain, M.-C. Schanne-Klein

In "Collagen: Methods and Protocols", I. Sagi and N. A. Afratis, eds. (Springer Science, 2019).

[Multiscale Characterization of Skin Mechanics Through in Situ Imaging \(book chapter\)](#)

J.-M. Allain, B. Lynch, M.-C. Schanne-Klein

In "Skin Biophysics -- From Experimental Characterisation to Advanced Modelling", G. Limbert, ed. (Springer Nature, 2019).

[Highly concentrated collagen solutions leading to transparent scaffolds of controlled three-dimensional organizations for corneal epithelial cell colonization](#)

A. Tidu, D. Ghoubay-Benallaoua, C. Teulon, S. Asnacios, K. Grieve, F. Portier, **M.-C. Schanne-Klein**, V. Borderie, and G. Mosser

Biomater. Sci. **6**, 1492-1502 (2018). Doi : 10.1039/C7BM01163F

[How aging impacts skin biomechanics: a multiscale study in mice,](#)

B. Lynch, C. Bonod-Bidaud, G. Ducourthial, J.-S. Affagard, S. Bancelin, S. Psilodimitrakopoulos, F. Ruggiero, J.-M. Allain, and M.-C. Schanne-Klein

Scientific Reports **7**, 13750 (2017). DOI: 10.1038/s41598-017-13150-4

[Easy xeno-free and feeder-free method for isolating and growing limbal stromal and epithelial stem cells of the human cornea.](#)

D. Ghoubay-Benallaoua, C. de Sousa, R. Martos, G. Latour, M.-C. Schanne-Klein, E. Dupin, V. Borderie

Plos One **12** (11), e0188398 (2017). DOI : 10.1371/journal.pone.0188398

[Stromal striae: a new insight into corneal physiology and mechanics](#)

K. Grieve, D. Ghoubay, C. Georgeon, G. Latour, A. Nahas, K. Plamann, C. Crotti, R. Bocheux, M. Borderie, T.-M. Nguyen, F. Andreiuolo, M.-C. Schanne-Klein, and V. Borderie
Scientific Reports **7**, 13584 (2017). DOI: 10.1038/s41598-017-13194-6

[Stabilization of collagen fibrils by gelatin addition: a study of collagen/gelatin dense phases](#)
F. Portier, C. Teulon, A. Nowacka-Perrin, F. Guenneau, M.-C. Schanne-Klein, and G. Mosser
Langmuir **33** (45), 12916–12925 (2017). Doi : 10.1021/acs.langmuir.7b02142

[A novel microstructural interpretation for the biomechanics of mouse skin derived from multiscale characterization](#)
B. Lynch, S. Bancelin, C. Bonod-Bidaud, J.-B. Guesquin, F. Ruggiero, M.-C. Schanne-Klein, and J.-M. Allain
Acta Biomaterialia **50**, 302-311 (2017).

[Cell Viability and Shock Wave Amplitudes in the Endothelium of Porcine Cornea exposed to Ultrashort Laser Pulses](#)
S. A. Hussain, C. Milián, C. Crotti, L. Kowalczyk, F. Alahyane, Z. Essaidi, A. Couairon, M.-C. Schanne-Klein, and K. Plamann
Graefes Arch. Clin. Exp. Ophthalmol. **255**, 945-953 (2017). doi:10.1007/s00417-017-3583-3

[Affine kinematics in planar fibrous connective tissues: an experimental investigation,](#)
C. Jayyosi, J.-S. Affagard, G. Ducourthial, C. Bonod-Bidaud, B. Lynch, S. Bancelin, F. Ruggiero, M.-C. Schanne-Klein, J.-M. Allain, K. Bruyère-Garnier, and M. Coret,
Biomechanics and Modeling in Mechanobiology **16** (4), 1459-1473 (2017).

[Label-free imaging of bone multiscale porosity and interfaces using third-harmonic generation microscopy.](#)
R. Genhial, E. Beaurepaire, M.-C. Schanne-Klein, F. Peyrin, D. Farlay, C. Olivier, Y. Bala, G. Boivin, J.-C. Vil, J. Derouard, D. Débarre*, A. Gourrier*
Scientific Reports, **7** :3419 (2017). doi:10.1038/s41598-017-03548-5

[Correlative nonlinear optical microscopy and infrared nanoscopy reveals collagen degradation in altered parchments](#)
G. Latour, L. Robinet, A. Dazzi, F. Portier, A. Deniset-Besseau, and M.-C. Schanne-Klein
Sci. Rep. **6**, 26344 (2016).

[Efficient second-harmonic imaging of collagen in histological slides using Bessel beam excitation](#)
N. Vuillemin, P. Mahou, D. Débarre, T. Gacoin, P.-L. Tharoux, M.-C. Schanne-Klein, W. Supatto, and E. Beaurepaire
Sci. Rep. **6**, 29863 (2016). Erratum: **6**, 31258 (2016)

[Probing the 3D structure of cornea-like collagen liquid crystals with polarization-resolved SHG microscopy,](#) C. Teulon, A. Tidu, F. Portier, G. Mosser, and M.-C. Schanne-Klein, **Opt. Express** **24**, 16084 (2016).

[Simultaneous microstructural and mechanical characterization of human corneas at increasing pressure](#)
A. Benoit, G. Latour, M.-C. Schanne-Klein, and J.-M. Allain
J. Mech. Behav. Biomed. Mater. **60**, 93-105 (2016).

[Microscopie optique non-linéaire quantitative](#)
E. Beaurepaire, M.-C. Schanne-Klein, N. Vuillemin, W. Supatto, and P. Mahou
Brevet FR 1651850 (dépôt le 04/03/2016)

[Ex vivo multiscale quantitation of skin biomechanics in wild-type and genetically-modified mice using multiphoton microscopy](#)

S. Bancelin, B. Lynch, C. Bonod-Bidaud, G. Ducourthial, S. Psilodimitrakopoulos, P. Dokladal, J.-M. Allain, M.-C. Schanne-Klein, and F. Ruggiero
Scientific Reports **5**, 17635 (2015)

[Optimization of Picrosirius Red Staining Protocol to Determine Collagen Fiber Orientations in Vaginal and Uterine Cervical Tissues by Mueller Polarized Microscopy](#)

A. Nazac, S. Bancelin, B. Teig, B. H. Ibrahim, H. Fernandez, M.-C. Schanne-Klein, A. De Martino
Microsc. Res. Tech. **78**, 723-730 (2015)

[Theoretical, numerical and experimental study of geometrical parameters that affect anisotropy measurements in polarization-resolved SHG microscopy](#)

C. Teulon, I. Gusachenko, G. Latour, and M.-C. Schanne-Klein
Opt. Express **23**, 9313-9328 (2015).

[Determination of collagen fibril size via absolute measurements of second-harmonic generation signals](#)

S. Bancelin, C. Aimé, I. Gusachenko, L. Kowalczyk, G. Latour, T. Coradin, M.-C. Schanne-Klein
Nat. Commun. **5**, art. 4920 (2014)- DOI 10.1038/ncomms5920

[Combined SHG/fluorescence imaging and stereological analysis of collagen 3D self-assembly on silica nano-surfaces](#)

S. Bancelin, E. Decencière, V. Machairas, C. Albert, T. Coradin, M.-C. Schanne-Klein, C. Aimé
Soft Matter **10**, 6651-6657 (2014)

[Determination of collagen fiber orientation in histological slides using Mueller microscopy and validation by second harmonic generation imaging](#)

S. Bancelin, A. Nazac, B. H. Ibrahim, P. Dokladal, E. Decencière, B. Teig, H. Haddad, H. Fernandez, M.-C. Schanne-Klein, and A. de Martino
Opt. Express **22**, 22561-22574 (2014)

[Numerical simulation of polarization-resolved second harmonic microscopy in birefringent media I.](#)

Gusachenko and M.-C. Schanne-Klein
Phys. Rev. A **88**, 053811 (2013).

[Intracellular dynamics of archaeal FANCM homologue Hef in response to halted DNA replication](#)

R. Lestini, S. P. Laptinok, J. Kühn, M. A. Hink, M.-C. Schanne-Klein, U. Liebl, H. Myllykallio
Nucleic Acid Research, **22**, 10358 (2013).

[Achievement of cornea-like organizations in dense collagen I solutions: clues to the physico-chemistry of cornea morphogenesis](#)

P. De Sa Peixoto, A. Deniset-Besseau, M. Schmutz, A. Anglo, C. Illoul, M.-C. Schanne-Klein, and G. Mosser
Soft Matter **9**, 11241 (2013).

[Chapter 15: SHG imaging and quantization of fibrosis](#)

Schanne-Klein, M.-C.

In "Second Harmonic Generation Imaging", F. S. Pavone and P. J. Campagnola Editors, p.349-371 (Taylor and Francis, 2013)

[A Bottom-Up Approach to Build the Hyperpolarizability of Peptides and Proteins from their Amino-Acids](#)

J. Duboisset, A. Deniset-Besseau, E. Benichou, I. Russier-Antoine, N. Lascoux, C. Jonin, F. Hache, M.-C. Schanne-Klein and P.-F. Brevet
J. Phys. Chem. B **117**, 9877-9881 (2013)

[Multimodal Highlighting of Structural Abnormalities in Diabetic Rat and Human Corneas](#)

L. Kowalczyk, G. Latour, J.-L. Bourges, M. Savoldelli, J.-C. Jeanny, K. Plamann, M.-C. Schanne-Klein and F. Behar-Cohen
Trans. Vis. Sci. Tech. **2**(2), art. 3 (2013)

[Probing Ordered Lipid Assemblies with Polarized Third-Harmonic-Generation Microscopy,](#)

M. Zimmerley, P. Mahou, D. Debarre, M.-C. Schanne-Klein, and E. Beaufrepaire
Phys. Rev. X **3**, 011002 (2013)

[Hyperglycemia-Induced Abnormalities in Rat and Human Corneas: The Potential of Second Harmonic Generation Microscopy](#)

G. Latour, L. Kowalczyk, M. Savoldelli, J.-L. Bourges, K. Plamann, F. Behar-Cohen, and M.-C. Schanne-Klein
PLoS ONE **7**(11) e48388 (2012)

[In situ 3D characterization of historical coatings and wood using multimodal nonlinear optical microscopy](#)

G. Latour, J.-P. Echard, M. Didier and M.-C. Schanne-Klein
Opt. Express **20** (22), 24623 (2012)

[3D resolved mapping of optical aberrations in thick tissues](#)

J. Zeng, P. Mahou, M.-C. Schanne-Klein, E. Beaufrepaire, and D. Débarre
Biomed. Opt. Express **3**, 1898-1913 (2012)

[Imaging and 3D Morphological Analysis of Collagen Fibrils](#)

H. Altendorf, E. Decenci re, D. Jeulin, P. D. S. Peixoto, A. Deniset-Besseau, E. Angelini, G. Mosser, and M.-C. Schanne-Klein
J. Microscopy **247** (2), 161–175 (2012)

[In situ three-dimensional monitoring of collagen fibrillogenesis using SHG microscopy](#)

S. Bancelin, C. Aim e, T. Coradin, and M.-C. Schanne-Klein
Biomed. Opt. Express **3**, 1446-1454 (2012).

[Polarization-resolved second-harmonic microscopy in tendon upon mechanical stretching](#)

I. Gusachenko, Y. G. Housen, V. Tran, J.-M. Allain, and M.-C. Schanne-Klein
Biophys. J. **102**, 2220-2229 (2012).

[In vivo imaging of the cornea by polarization-resolved Second Harmonic microscopy](#)

G. Latour, I. Gusachenko, L. Kowalczyk, I. Lamarre and M.-C. Schanne-Klein
Biomed. Opt. Express **3**, 1 (2012)

[Schanne-Klein, M.-C., E. Beaufrepaire, M. Strupler, D. Débarre, N. Olivier, and P. Mahou.](#)

Microscopie optique non-linéaire quantitative utilisant un faisceau mis en forme.
Brevet FR1162056 (dépôt le 20/12/2011)

[Quantitative assessment of collagen I liquid crystal organizations: role of ionic force and acidic solvent, and evidence of new phases](#)

P. De Sa Peixoto, A. Deniset-Besseau, M.-C. Schanne-Klein and G. Mosser
Soft Matter **7**, 11203-11210 (2011).

Monitoring micrometer-scale collagen organization in rat-tail tendon upon mechanical strain using second harmonic generation microscopy.

Y. Goulam Houssen, I. Gusachenko, M.-C. Schanne-Klein and J.-M. Allain
J. Biomech. **44**, 2047-2052 (2011)

Polarization-resolved Second Harmonic microscopy in anisotropic thick tissues

I. Gusachenko, G. Latour and M.-C. Schanne-Klein
Opt. Express **18**, 19339-19352 (2010)

Multiphoton microscopy of engineered dermal substitutes: assessment of 3D collagen matrix remodeling induced by fibroblasts contraction

A.-M. Pena, D. Fagot, C. Olive, J.-F. Michelet, J.-B. Galey, F. Leroy, E. Beaurepaire, J.-L. Martin, A. Colonna and M.-C. Schanne-Klein
J. Biomed. Opt. **15**, 056018 (2010)

Harmonic microscopy of isotropic and anisotropic microstructure of the human cornea

N. Olivier, F. Aptel, K. Plamann, M.-C. Schanne-Klein and E. Beaurepaire
Opt. Express **18**, 5028-5040 (2010)

Multimodal nonlinear imaging of the human cornea

F. Aptel, N. Olivier, A. Deniset-Besseau, J.-M. Legeais, K. Plamann, M.-C. Schanne-Klein and E. Beaurepaire
Invest. Ophthalmol. Vis. Sci **51**, 2459-2465 (2010)

Nonlinear optical imaging of lyotropic cholesteric liquid crystals

A. Deniset-Besseau, P. De Sa Peixoto, G. Mosser and M.-C. Schanne-Klein
Opt. Express **18**, 1113-1121 (2010)

Recent approaches of quantification of interstitial fibrosis in renal transplantation.

A. Servais, V. Meas-Yedid, E. Morelon, M. Strupler, M.-C. Schanne-Klein, C. Legendre, J.-C. Olivo-Marin and É. Thervet
Médecine Sciences **25**, 945 (2009)

Measurement of the Second-Order Hyperpolarizability of the Collagen Triple Helix and Determination of its Physical Origin

A. Deniset-Besseau, J. Duboisset, E. Benichou, F. Hache, P.-F. Brevet and M.-C. Schanne-Klein
J. Phys. Chem. B **113**, 13437-13445 (2009)

Second Harmonic Microscopy to Quantify Renal Interstitial Fibrosis and Arterial Remodeling

M. Strupler, M. Hernest, C. Fligny, J.-L. Martin, P.-L. Tharaux and M.-C. Schanne-Klein
J. Biomed. Optics **13**, 054041 (2008)

E. Beaurepaire, N. Olivier, D. Débarre, M.-C. Schanne-Klein and J.-L. Martin,

Procédé et système de microscopie non-linéaire cohérente à modulation de volume focal pour sonder la nanostructuration de matériaux organisés,
Brevet, N° soumission: 1000032861 (27/06/2008)

Three-dimensional investigation and scoring of extracellular matrix remodeling during lung fibrosis using multiphoton microscopy

A. M. Pena, A. Fabre, D. Débarre, J. Marchal-Somme, B. Crestani, J.-L. Martin, E. Beaurepaire and M.-C. Schanne-Klein
Microsc. Res. Tech. **70**, 162-170 (2007)

[Second harmonic imaging and scoring of collagen in fibrotic tissues](#)

M. Strupler, A.-M. Pena, M. Hernest, P.-L. Tharaux, J.-L. Martin, E. Beaurepaire, M.-C. Schanne-Klein

Opt. Express **15**, 4054-4065 (2007)

[Imaging the distribution and transport dynamics of lipid bodies in unstained cells and tissues using third harmonic generation microscopy](#)

D. Débarre, W. Suppato, A. M. Pena, A. Fabre, T. Tordjmann, L. Combettes, M. C. Schanne-Klein and E. Beaurepaire

Nat. Methods **3**, 47 - 53 (2006)

[Micrometer scale ex vivo multiphoton imaging of unstained arterial wall structure](#)

T. Boulesteix, A. M. Pena, N. Pagès, G. Godeau, M.-P. Sauviat, E. Beaurepaire, M. C. Schanne-Klein

Cytometry **69A**, 20-26 (2006)

[Chiroptical effects in the second harmonic generation from collagens I and IV: applications in nonlinear microscopy.](#)

A. M. Pena, T. Boulesteix, T. Dartigalongue, M. Strupler, E. Beaurepaire and M. C. Schanne-Klein

Nonlinear Optics, Quantum Optics X, 1 (2006)

[Nouvelle approche des fibroses par microscopie multiphotonique avec génération de second harmonique.](#)

M. Hernest, A. M. Pena, M. Strupler, E. Beaurepaire, J.-L. Martin, M.-C. Schanne-Klein and P.-L. Tharaux

Médecine Sciences **10**, 820 (2006)

[Microscopies multi-harmoniques pour l'imagerie structurale de tissus intacts](#)

D. Débarre, A. M. Pena, W. Supatto, T. Boulesteix, M. Strupler, M. P. Sauviat, J.-L. Martin, M.-C. Schanne-Klein and E. Beaurepaire

Médecine Sciences **10**, 845 (2006)

[Spectroscopic analysis of keratin endogenous signal for skin multiphoton microscopy](#)

A.-M. Pena, M. Strupler, T. Boulesteix, G. Godeau and M.-C. Schanne-Klein

Opt. Express **13**, 6268-6274; 6667 (2005)

[Chiroptical effects in the second harmonic signal of collagens I and IV](#)

A.-M. Pena, T. Boulesteix, T. Dartigalongue and M.-C. Schanne-Klein

J. Am. Chem. Soc. **127**, 10314-10322 (2005)

[Velocimetric third-harmonic generation microscopy: micrometer-scale quantification of morphogenetic movements in unstained embryos.](#)

D. Débarre, W. Suppato, E. Farge, B. Moulia, M. C. Schanne-Klein and E. Beaurepaire

Opt. Lett. **29**, 28881-2884 (2004)

[Second harmonic microscopy of unstained living cardiac myocytes: measurements of sarcomere length with 20 nm accuracy.](#)

T. Boulesteix, E. Beaurepaire, M.-P. Sauviat and M. C. Schanne-Klein

Opt. Lett. **29**, 2031-2033 (2004)

[Polarization rotation in a second harmonic reflection experiment from an isotropic surface of chiral Träger base.](#)

F. Hache, T. Boulesteix, M.-C. Schanne-Klein, M. Alexandre, G. Lemerrier and C. Andraud

J. Phys. Chem. B **107**, 5261-5266 (2003)

[Strong chiroptical effects in surface second harmonic generation obtained for molecules exhibiting excitonic coupling chirality.](#)

M.-C. Schanne-Klein, T. Boulesteix, F. Hache, M. Alexandre, G. Lemerrier and C. Andraud
Chem. Phys. Lett. **362**, 103-108 (2002)

[Wavelength-dependence of the nonlinear circular dichroism in a chiral Ruthenium-tris\(bipyridyl\) solution](#)

H. Mesnil, M.-C. Schanne-Klein, F. Hache, M. Alexandre, G. Lemerrier and C. Andraud
Phys. Rev. A **66**, 013802 1-9 (2002)

[Nonlinear optical activity in chiral molecules: surface second harmonic generation and nonlinear circular dichroism.](#)

F. Hache, M.-C. Schanne-Klein, H. Mesnil, M. Alexandre, G. Lemerrier and C. Andraud
C. R. A. S. Physique **3**, 429-437 (2002)

[Magnetic chiroptical effects in surface second harmonic reflection](#)

M.-C. Schanne-Klein, F. Hache, T. Brotin, C. Andraud and A. Collet
Chem. Phys. Lett. **338**, 159-166 (2001)

[Experimental observation of nonlinear dichroism in a pump-probe experiment](#)

H. Mesnil, M.-C. Schanne-Klein, F. Hache, M. Alexandre, G. Lemerrier and C. Andraud
Chem. Phys. Lett. **338**, 269-276 (2001)

[Application of classical models of chirality to surface second harmonic generation](#)

F. Hache, H. Mesnil and M.-C. Schanne-Klein
J. Chem. Phys. **115**, 6707-6715 (2001)

[Theoretical investigation of the nonlinear circular dichroism in a liquid of chiral molecules](#)

F. Hache, M.-C. Schanne-Klein and H. Mesnil
Nonlinear Optics **25**, 153-158 (2000)

[Effects of a modulation of the pump-polarization in a degenerate pump/probe experiment](#)

H. Mesnil, M.-C. Schanne-Klein and F. Hache
Eur. Phys. J. D **5**, 447-452 (1999)

[Nonlinear circular dichroism in a liquid of chiral molecules: a theoretical investigation](#)

F. Hache, H. Mesnil and M.-C. Schanne-Klein
Phys. Rev. B **60**, 6405-6411 (1999)

[Symmetry and phase determination of second-harmonic reflection from calcite surfaces](#)

S. Andersson, M.-C. Schanne-Klein and F. Hache
Phys. Rev. B **59**, 3210-3217 (1999)

[Investigation of the phase of the second-order susceptibility measured in off-resonant surface second-harmonic generation](#)

F. Hache, S. Andersson, M.-C. Schanne-Klein and C. Flytzanis
Appl. Phys. B **68**, 321-323 (1999)

[Off resonance second order optical activity of isotropic layers of chiral molecules: observation of electric and magnetic contributions](#)

M.-C. Schanne-Klein, F. Hache, A. Roy, C. Flytzanis and C. Payrastré
J. Chem. Phys. **108**, 9436-9443 (1998)

The role of photodarkening and Auger recombination in the dynamics of the optical response for Cd(SSe) nanoparticles

C. Flytzanis, D. Ricard and M.-C. Schanne-Klein

Journal of Luminescence **70**, 212-221 (1996)

The size dependence of the resonant Kerr nonlinearity of Cd(S,Se)-doped glasses revisited.

M.-C. Schanne-Klein, L. Piveteau, M. Ghanassi and D. Ricard

Appl. Phys. Lett. **67**, 579-581 (1995)

Origin of the resonant Kerr nonlinearity of CdSSe-doped glasses and related topics.

M. Ghanassi, L. Piveteau, L. Saviot, M.-C. Schanne-Klein, D. Ricard and C. Flytzanis

Appl. Phys. B **61**, 17-26 (1995)

Dielectric confinement and the linear and nonlinear optical properties of semiconductor doped-glasses.

D. Ricard, M. Ghanassi and M. C. Schanne-Klein

Opt. Commun. **108**, 311-318 (1994)

Time resolved measurements of carrier recombination in experimental semiconductor-doped glasses: confirmation of the role of Auger recombination.

M. Ghanassi, M.-C. Schanne-Klein, F. Hache, A. I. Ekimov, D. Ricard and C. Flytzanis

Appl. Phys. Lett. **62**, 78-80 (1993)

Absorption and intensity-dependent photoluminescent measurements on CdSe quantum dots: assignment of the first electronic transitions.

A. I. Ekimov, F. Hache, M.-C. Schanne-Klein, D. Ricard, C. Flytzanis, I. A. Kudryavtsev, T. V. Yaveza, A. V. Rodina and A. L. Efros

J. Opt. Soc. Am. B **10**, 100-106 (1993)

Optical phase conjugation in Schott CdSSe-doped glasses: origin of the nonlinear response

M.-C. Schanne-Klein, F. Hache, D. Ricard and C. Flytzanis

J. Opt. Soc. Am. B **9**, 2234-2239 (1992)

Some considerations on the size dependence of optical properties of solids and aggregates.

D. Ricard, F. Hache and M. C. Klein

Opt. Commun. **86**, 531-537 (1991)

Photoluminescence study of Schott commercial and experimental CdSSe-doped glasses: observation of surface states

F. Hache, M. C. Klein, D. Ricard and C. Flytzanis

J. Opt. Soc. Am. B **8**, 1802-1806 (1991)

The size dependence of electron-phonon coupling in semiconductor nanospheres: the case of CdSe

M. C. Klein, F. Hache, D. Ricard and C. Flytzanis

Phys. Rev. B **42**, 11123-11132 (1990)

Period-doubling and period-quadrupling for an actively mode-locked laser diode with an extended cavity.

J. Chesnoy, M. C. Klein, L. Chusseau and J. M. Lourtioz

J. Appl. Phys. **67**, 7615-7617 (1990)