# Lucie Carrier

List of Publications by Year
in descending order



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|---|---|---|---|
| 109 papers | 8,385 citations | 44042 48 h-index | 46771 89 g-index |
| 111 all docs | 111 docs citations | 111 times ranked | 7010 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The detyrosination/re-tyrosination cycle of tubulin and its role and dysfunction in neurons and cardiomyocytes. Seminars in Cell and Developmental Biology, 2023, 137, 46-62. | 2.3 | 20 |
| 2 | Targeted therapies in genetic dilated and hypertrophic cardiomyopathies: from molecular mechanisms to therapeutic targets. A position paper from the Heart Failure Association (HFA) and the Working Group on Myocardial Function of the European Society of Cardiology (ESC). European Journal of Heart Failure, 2022, 24, 406-420. | 2.9 | 22 |
| 3 | Animal models and animal-free innovations for cardiovascular research: current status and routes to be explored. Consensus document of the ESC Working Group on Myocardial Function and the ESC Working Group on Cellular Biology of the Heart. Cardiovascular Research, 2022, 118, 3016-3051. | 1.8 | 30 |
| 4 | Interpretation and actionability of genetic variants in cardiomyopathies: a position statement from the European Society of Cardiology Council on cardiovascular genomics. European Heart Journal, 2022, 43, 1901-1916. | 1.0 | 32 |
| 5 | CMYA5 is a novel interaction partner of FHL2 in cardiac myocytes. FEBS Journal, 2022, 289, 4622-4645. | 2.2 | 6 |
| 6 | A high-throughput screening identifies ZNF418 as a novel regulator of the ubiquitin-proteasome system and autophagy-lysosomal pathway. Autophagy, 2021, 17, 3124-3139. | 4.3 | 12 |
| 7 | Towards standardization of echocardiography for the evaluation of left ventricular function in adult rodents: a position paper of the ESC Working Group on Myocardial Function. Cardiovascular Research, 2021, 117, 43-59. | 1.8 | 72 |
| 8 | Targeting the population for gene therapy with MYBPC3. Journal of Molecular and Cellular Cardiology, 2021, 150, 101-108. | 0.9 | 23 |
| 9 | Proteomic and Functional Studies Reveal Detyrosinated Tubulin as Treatment Target in Sarcomere Mutation-Induced Hypertrophic Cardiomyopathy. Circulation: Heart Failure, 2021, 14, e007022. | 1.6 | 58 |
| 10 | Cas9-expressing chickens and pigs as resources for genome editing in livestock. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 22 |
| 11 | A Transgenic Mouse Model of Eccentric Left Ventricular Hypertrophy With Preserved Ejection Fraction Exhibits Alterations in the Autophagy-Lysosomal Pathway. Frontiers in Physiology, 2021, 12, 614878. | 1.3 | 2 |
| 12 | Cardiovascular magnetic resonance detects microvascular dysfunction in a mouse model of hypertrophic cardiomyopathy. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 63. | 1.6 | 3 |
| 13 | Generation of bi-allelic MYBPC3 truncating mutant and isogenic control from an iPSC line of a patient with hypertrophic cardiomyopathy. Stem Cell Research, 2021, 55, 102489. | 0.3 | 1 |
| 14 | Translational investigation of electrophysiology in hypertrophic cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2021, 157, 77-89. | 0.9 | 16 |
| 15 | Ouabain worsens diastolic sarcomere length in myocytes from a cardiomyopathy mouse model. European Journal of Pharmacology, 2021, 904, 174170. | 1.7 | 1 |
| 16 | A Novel miRNA Screen Identifies miRNA-4454 as a Candidate Biomarker for Ventricular Fibrosis in Patients with Hypertrophic Cardiomyopathy. Biomolecules, 2021, 11, 1718. | 1.8 | 14 |
| 17 | Autophagy in cardiomyopathies. Biochimica Et Biophysica Acta - Molecular Cell Research, 2020, 1867, 118432. | 1.9 | 29 |
| 18 | Is Desmin Propensity to Aggregate Part of its Protective Function?. Cells, 2020, 9, 491. | 1.8 | 19 |

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|---|---|---|---|
| 19 | Gene therapy for inherited arrhythmias. Cardiovascular Research, 2020, 116, 1635-1650. | 1.8 | 20 |
| 20 | Depletion of Vasohibin 1 Speeds Contraction and Relaxation in Failing Human Cardiomyocytes. Circulation Research, 2020, 127, e14-e27. | 2.0 | 32 |
| 21 | Gene therapy strategies in the treatment of hypertrophic cardiomyopathy. Pflugers Archiv European Journal of Physiology, 2019, 471, 807-815. | 1.3 | 52 |
| 22 | Myoarchitectural disarray of hypertrophic cardiomyopathy begins preâ€birth. Journal of Anatomy, 2019, 235, 962-976. | 0.9 | 34 |
| 23 | Association of Asymmetric Dimethylarginine and Diastolic Dysfunction in Patients with Hypertrophic Cardiomyopathy. Biomolecules, 2019, 9, 277. | 1.8 | 8 |
| 24 | Analysis of Contractile Function of Permeabilized Human Hypertrophic Cardiomyopathy Multicellular Heart Tissue. Frontiers in Physiology, 2019, 10, 239. | 1.3 | 9 |
| 25 | Targeted panel sequencing in pediatric primary cardiomyopathy supports a critical role of TNNI3. Clinical Genetics, 2019, 96, 549-559. | 1.0 | 28 |
| 26 | Disease modeling of a mutation in Î±â€actinin 2 guides clinical therapy in hypertrophic cardiomyopathy. EMBO Molecular Medicine, 2019, 11, e11115. | 3.3 | 88 |
| 27 | Making Sense of Inhibiting Nonsense in Hypertrophic Cardiomyopathy. Circulation, 2019, 139, 812-814. | 1.6 | 3 |
| 28 | Biallelic mutation in MYH7 and MYBPC3 leads to severe cardiomyopathy with left ventricular noncompaction phenotype. Human Mutation, 2019, 40, 1101-1114. | 1.1 | 22 |
| 29 | Phosphomimetic cardiac myosin-binding protein C partially rescues a cardiomyopathy phenotype in murine engineered heart tissue. Scientific Reports, 2019, 9, 18152. | 1.6 | 13 |
| 30 | The homozygous K280N troponin T mutation alters cross-bridge kinetics and energetics in human HCM. Journal of General Physiology, 2019, 151, 18-29. | 0.9 | 25 |
| 31 | Cardiomyopathy phenotypes in human-induced pluripotent stem cell-derived cardiomyocytesâ€"a systematic review. Pflugers Archiv European Journal of Physiology, 2019, 471, 755-768. | 1.3 | 57 |
| 32 | Mechanistic role of the CREB-regulated transcription coactivator 1 in cardiac hypertrophy. Journal of Molecular and Cellular Cardiology, 2019, 127, 31-43. | 0.9 | 5 |
| 33 | S100A4 as a Target of the E3-Ligase Asb2Î² and Its Effect on Engineered Heart Tissue. Frontiers in Physiology, 2018, 9, 1292. | 1.3 | 3 |
| 34 | CRISPR/Cas9 editing in human pluripotent stem cell-cardiomyocytes highlights arrhythmias, hypocontractility, and energy depletion as potential therapeutic targets for hypertrophic cardiomyopathy. European Heart Journal, 2018, 39, 3879-3892. | 1.0 | 176 |
| 35 | Diltiazem prevents stressâ€induced contractile deficits in cardiomyocytes, but does not reverse the cardiomyopathy phenotype in Mybpc3â€knockâ€in mice. Journal of Physiology, 2017, 595, 3987-3999. | 1.3 | 18 |
| 36 | Blinded Contractility Analysis in hiPSC-Cardiomyocytes in Engineered Heart Tissue Format: Comparison With Human Atrial Trabeculae. Toxicological Sciences, 2017, 158, 164-175. | 1.4 | 52 |

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|---|---|---|---|
| 37 | Evaluation of MYBPC3 trans -Splicing and Gene Replacement as Therapeutic Options in Human iPSC-Derived Cardiomyocytes. Molecular Therapy - Nucleic Acids, 2017, 7, 475-486. | 2.3 | 74 |
| 38 | Activation of Autophagy Ameliorates Cardiomyopathy in Mybpc3 -Targeted Knockin Mice. Circulation: Heart Failure, 2017, 10, . | 1.6 | 53 |
| 39 | Nebivolol Desensitizes Myofilaments of a Hypertrophic Cardiomyopathy Mouse Model. Frontiers in Physiology, 2017, 8, 558. | 1.3 | 11 |
| 40 | Epigallocatechin-3-Gallate Accelerates Relaxation and Ca2+ Transient Decay and Desensitizes Myofilaments in Healthy and Mybpc3-Targeted Knock-in Cardiomyopathic Mice. Frontiers in Physiology, 2016, 7, 607. | 1.3 | 16 |
| 41 | The embryological basis of subclinical hypertrophic cardiomyopathy. Scientific Reports, 2016, 6, 27714. | 1.6 | 29 |
| 42 | Comparison of the effects of a truncating and a missense MYBPC3 mutation on contractile parameters of engineered heart tissue. Journal of Molecular and Cellular Cardiology, 2016, 97, 82-92. | 0.9 | 48 |
| 43 | Selective phosphorylation of PKA targets after Î²-adrenergic receptor stimulation impairs myofilament function inMybpc3-targeted HCM mouse model. Cardiovascular Research, 2016, 110, 200-214. | 1.8 | 28 |
| 44 | Serum Matrix Metalloproteinases as Quantitative Biomarkers for Myocardial Fibrosis and Sudden Cardiac Death Risk Stratification in Patients With Hypertrophic Cardiomyopathy. Journal of Cardiac Failure, 2016, 22, 845-850. | 0.7 | 31 |
| 45 | S â€glutathiolation impairs phosphoregulation and function of cardiac myosinâ€binding protein C in human heart failure. FASEB Journal, 2016, 30, 1849-1864. | 0.2 | 38 |
| 46 | Ranolazine antagonizes catecholamine-induced dysfunction in isolated cardiomyocytes, but lacks long-term therapeutic effectsin vivoin a mouse model of hypertrophic cardiomyopathy. Cardiovascular Research, 2016, 109, 90-102. | 1.8 | 38 |
| 47 | I-1-deficiency negatively impacts survival in a cardiomyopathy mouse model. IJC Heart and Vasculature, 2015, 8, 87-94. | 0.6 | 3 |
| 48 | Targeted Mybpc3 Knock-Out Mice with Cardiac Hypertrophy Exhibit Structural Mitral Valve Abnormalities. Journal of Cardiovascular Development and Disease, 2015, 2, 48-65. | 0.8 | 9 |
| 49 | Research priorities in sarcomeric cardiomyopathies. Cardiovascular Research, 2015, 105, 449-456. | 1.8 | 48 |
| 50 | Targets for therapy in sarcomeric cardiomyopathies. Cardiovascular Research, 2015, 105, 457-470. | 1.8 | 122 |
| 51 | Animal and in silico models for the study of sarcomeric cardiomyopathies. Cardiovascular Research, 2015, 105, 439-448. | 1.8 | 45 |
| 52 | PLEKHM2mutation leads to abnormal localization of lysosomes, impaired autophagy flux and associates with recessive dilated cardiomyopathy and left ventricular noncompaction. Human Molecular Genetics, 2015, 24, 7227-7240. | 1.4 | 55 |
| 53 | Cardiac myosin-binding protein C (MYBPC3) in cardiac pathophysiology. Gene, 2015, 573, 188-197. | 1.0 | 148 |
| 54 | Changes in the cardiac metabolome caused by perhexiline treatment in a mouse model of hypertrophic cardiomyopathy. Molecular BioSystems, 2015, 11, 564-573. | 2.9 | 34 |

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|---|---|---|---|
| 55 | The E3 ubiquitin ligase Asb2Î² is downregulated in a mouse model of hypertrophic cardiomyopathy and targets desmin for proteasomal degradation. Journal of Molecular and Cellular Cardiology, 2015, 87, 214-224. | 0.9 | 35 |
| 56 | Sexual dimorphic response to exercise in hypertrophic cardiomyopathy-associated MYBPC3-targeted knock-in mice. Pflugers Archiv European Journal of Physiology, 2015, 467, 1303-1317. | 1.3 | 35 |
| 57 | Automated analysis of contractile force and Ca<sup>2+</sup>transients in engineered heart tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H1353-H1363. | 1.5 | 69 |
| 58 | Proteasome inhibition slightly improves cardiac function in mice with hypertrophic cardiomyopathy. Frontiers in Physiology, 2014, 5, 484. | 1.3 | 24 |
| 59 | Mybpc3 gene therapy for neonatal cardiomyopathy enables long-term disease prevention in mice. Nature Communications, 2014, 5, 5515. | 5.8 | 131 |
| 60 | FHL2 expression and variants in hypertrophic cardiomyopathy. Basic Research in Cardiology, 2014, 109, 451. | 2.5 | 58 |
| 61 | Endothelinâ€1 Induces Myofibrillar Disarray and Contractile Vector Variability in Hypertrophic Cardiomyopathyâ€“Induced Pluripotent Stem Cellâ€“Derived Cardiomyocytes. Journal of the American Heart Association, 2014, 3, e001263. | 1.6 | 131 |
| 62 | MYBPC3 in hypertrophic cardiomyopathy: from mutation identification to RNA-based correction. Pflugers Archiv European Journal of Physiology, 2014, 466, 215-223. | 1.3 | 34 |
| 63 | Ubiquitin-proteasome system and hereditary cardiomyopathies. Journal of Molecular and Cellular Cardiology, 2014, 71, 25-31. | 0.9 | 64 |
| 64 | Contractile abnormalities and altered drug response in engineered heart tissue from Mybpc3-targeted knock-in mice. Journal of Molecular and Cellular Cardiology, 2013, 63, 189-198. | 0.9 | 65 |
| 65 | A novel genetic variant in the transcription factor Islet-1 exerts gain of function on myocyte enhancer factor 2C promoter activity. European Journal of Heart Failure, 2013, 15, 267-276. | 2.9 | 21 |
| 66 | GSK3Î² Phosphorylates Newly Identified Site in the Proline-Alanineâ€“Rich Region of Cardiac Myosinâ€“Binding Protein C and Alters Cross-Bridge Cycling Kinetics in Human. Circulation Research, 2013, 112, 633-639. | 2.0 | 48 |
| 67 | Impact of ANKRD1 mutations associated with hypertrophic cardiomyopathy on contraction parameters of engineered heart tissue. Basic Research in Cardiology, 2013, 108, 349. | 2.5 | 40 |
| 68 | Heterozygous LmnadelK32 mice develop dilated cardiomyopathy through a combined pathomechanism of haploinsufficiency and peptide toxicity. Human Molecular Genetics, 2013, 22, 3152-3164. | 1.4 | 72 |
| 69 | Perturbed Length-Dependent Activation in Human Hypertrophic Cardiomyopathy With Missense Sarcomeric Gene Mutations. Circulation Research, 2013, 112, 1491-1505. | 2.0 | 191 |
| 70 | Rescue of cardiomyopathy through U7sn<scp>RNA</scp>â€mediated exon skipping in Mybpc3â€targeted knockâ€in mice. EMBO Molecular Medicine, 2013, 5, 1128-1145. | 3.3 | 85 |
| 71 | Repair of Mybpc3 mRNA by 5â€²-trans-splicing in a Mouse Model of Hypertrophic Cardiomyopathy. Molecular Therapy - Nucleic Acids, 2013, 2, e102. | 2.3 | 61 |
| 72 | Protein kinase D increases maximal Ca<sup>2+</sup>-activated tension of cardiomyocyte contraction by phosphorylation of cMyBP-C-Ser<sup>315</sup>. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H323-H331. | 1.5 | 20 |

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|---|---|---|---|
| 73 | Localization of Islet-1â€“Positive Cells in the Healthy and Infarcted Adult Murine Heart. Circulation Research, 2012, 110, 1303-1310. | 2.0 | 87 |
| 74 | Contractile Dysfunction Irrespective of the Mutant Protein in Human Hypertrophic Cardiomyopathy With Normal Systolic Function. Circulation: Heart Failure, 2012, 5, 36-46. | 1.6 | 127 |
| 75 | Evidence for FHL1 as a novel disease gene for isolated hypertrophic cardiomyopathy. Human Molecular Genetics, 2012, 21, 3237-3254. | 1.4 | 106 |
| 76 | Genetics of Hypertrophic and Dilated Cardiomyopathy. Current Pharmaceutical Biotechnology, 2012, 13, 2467-2476. | 0.9 | 23 |
| 77 | Increased myofilament Ca2+ sensitivity and diastolic dysfunction as early consequences of Mybpc3 mutation in heterozygous knock-in mice. Journal of Molecular and Cellular Cardiology, 2012, 52, 1299-1307. | 0.9 | 118 |
| 78 | The miRNA-212/132 family regulates both cardiac hypertrophy and cardiomyocyte autophagy. Nature Communications, 2012, 3, 1078. | 5.8 | 518 |
| 79 | How do MYBPC3 mutations cause hypertrophic cardiomyopathy?. Journal of Muscle Research and Cell Motility, 2012, 33, 75-80. | 0.9 | 93 |
| 80 | Adrenergic stress reveals septal hypertrophy and proteasome impairment in heterozygous Mybpc3-targeted knock-in mice. Journal of Muscle Research and Cell Motility, 2012, 33, 5-15. | 0.9 | 41 |
| 81 | Defective proteolytic systems in Mybpc3-targeted mice with cardiac hypertrophy. Basic Research in Cardiology, 2012, 107, 235. | 2.5 | 91 |
| 82 | Genetics of Hypertrophic and Dilated Cardiomyopathy. Current Pharmaceutical Biotechnology, 2012, 13, 2467-2476. | 0.9 | 25 |
| 83 | Distinction Between Two Populations of Islet-1-Positive Cells in Hearts of Different Murine Strains. Stem Cells and Development, 2011, 20, 1043-1052. | 1.1 | 32 |
| 84 | Cardiac myosin-binding protein C in hypertrophic cardiomyopathy: Mechanisms and therapeutic opportunities. Journal of Molecular and Cellular Cardiology, 2011, 50, 613-620. | 0.9 | 96 |
| 85 | The ubiquitinâ€“proteasome system in cardiomyopathies. Current Opinion in Cardiology, 2011, 26, 190-195. | 0.8 | 63 |
| 86 | Atrogin-1 and MuRF1 regulate cardiac MyBP-C levels via different mechanisms. Cardiovascular Research, 2010, 85, 357-366. | 1.8 | 81 |
| 87 | The ubiquitin-proteasome system and nonsense-mediated mRNA decay in hypertrophic cardiomyopathy. Cardiovascular Research, 2010, 85, 330-338. | 1.8 | 73 |
| 88 | Nonsense-Mediated mRNA Decay and Ubiquitinâ€“Proteasome System Regulate Cardiac Myosin-Binding Protein C Mutant Levels in Cardiomyopathic Mice. Circulation Research, 2009, 105, 239-248. | 2.0 | 152 |
| 89 | A new polymorphism in human calmodulin III gene promoter is a potential modifier gene for familial hypertrophic cardiomyopathy. European Heart Journal, 2009, 30, 1648-1655. | 1.0 | 39 |
| 90 | Cardiac Myosin-Binding Protein C Mutations and Hypertrophic Cardiomyopathy. Circulation, 2009, 119, 1473-1483. | 1.6 | 275 |

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|---|---|---|---|
| 91 | Prevention of Myofilament Dysfunction by Î²-Blocker Therapy in Postinfarct Remodeling. Circulation: Heart Failure, 2009, 2, 233-242. | 1.6 | 38 |
| 92 | Ubiquitin-Proteasome System Impairment Caused by a Missense Cardiac Myosin-binding Protein C Mutation and Associated with Cardiac Dysfunction in Hypertrophic Cardiomyopathy. Journal of Molecular Biology, 2008, 384, 896-907. | 2.0 | 80 |
| 93 | The ubiquitinâ€“proteasome system in cardiac dysfunction. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2008, 1782, 749-763. | 1.8 | 129 |
| 94 | Cardiac Myosin-Binding Protein C Is Required for Complete Relaxation in Intact Myocytes. Circulation Research, 2007, 101, 928-938. | 2.0 | 117 |
| 95 | Decreased phosphorylation levels of cardiac myosin-binding protein-C in human and experimental heart failure. Journal of Molecular and Cellular Cardiology, 2007, 43, 223-229. | 0.9 | 141 |
| 96 | Length and protein kinase A modulations of myocytes in cardiac myosin binding protein C-deficient mice. Cardiovascular Research, 2006, 69, 370-380. | 1.8 | 112 |
| 97 | Impairment of the ubiquitin?proteasome system by truncated cardiac myosin binding protein C mutants. Cardiovascular Research, 2005, 66, 33-44. | 1.8 | 139 |
| 98 | Expression of cardiac myosin-binding protein-C (cMyBP-C) in Drosophila as a model for the study of human cardiomyopathies. Human Molecular Genetics, 2005, 14, 7-17. | 1.4 | 12 |
| 99 | Asymmetric septal hypertrophy in heterozygous cMyBP-C null mice. Cardiovascular Research, 2004, 63, 293-304. | 1.8 | 129 |
| 100 | Human homozygous R403W mutant cardiac myosin presents disproportionate enhancement of mechanical and enzymatic properties. Journal of Molecular and Cellular Cardiology, 2004, 36, 355-362. | 0.9 | 75 |
| 101 | Hypertrophic Cardiomyopathy. Circulation, 2003, 107, 2227-2232. | 1.6 | 1,129 |
| 102 | Effect of MyBP-C Binding to Actin on Contractility in Heart Muscle. Journal of General Physiology, 2003, 122, 761-774. | 0.9 | 109 |
| 103 | Homozygotes for a R869G Mutation in the Î² -myosin Heavy Chain Gene have a Severe Form of Familial Hypertrophic Cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2000, 32, 1575-1583. | 0.9 | 59 |
| 104 | COOH-terminal truncated cardiac myosin-binding protein C mutants resulting from familial hypertrophic cardiomyopathy mutations exhibit altered expression and/or incorporation in fetal rat cardiomyocytes. Journal of Molecular Biology, 1999, 294, 443-456. | 2.0 | 68 |
| 105 | Cardiac Myosin-Binding Protein C and Hypertrophic Cardiomyopathy. Trends in Cardiovascular Medicine, 1998, 8, 151-157. | 2.3 | 11 |
| 106 | Cardiac Myosin Binding Protein C Gene Is Specifically Expressed in Heart During Murine and Human Development. Circulation Research, 1998, 82, 130-133. | 2.0 | 57 |
| 107 | Clinical Features and Prognostic Implications of Familial Hypertrophic Cardiomyopathy Related to the Cardiac Myosin-Binding Protein C Gene. Circulation, 1998, 97, 2230-2236. | 1.6 | 241 |
| 108 | Organization and Sequence of Human Cardiac Myosin Binding Protein C Gene (MYBPC3) and Identification of Mutations Predicted to Produce Truncated Proteins in Familial Hypertrophic Cardiomyopathy. Circulation Research, 1997, 80, 427-434. | 2.0 | 240 |

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|---|---|---|---|
| 109 | Cardiac myosin binding proteinâ€“C gene splice acceptor site mutation is associated with familial hypertrophic cardiomyopathy. Nature Genetics, 1995, 11, 438-440. | 9.4 | 417 |