業績リスト

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後の展望〜』(基調講演)，横浜国立大学保土ヶ谷キャンパス, (2005.3.29).

81. 齋藤 理一郎: “カーボンナノチューブの物理学 (招待講演)”，物理に夢中，東北大学川内キャンパス、仙台, (2005.5.13).

82. 齋藤 理一郎: “カーボンナノチューブの共鳴ラマン分光と発光分光 (招待講演)”，物性セミナー，東京大学大学院理学系研究科物理、東京, (2005.5.17).

83. 齋藤 理一郎: “カーボンナノチューブの基礎と応用”，物性談話会，名古屋大学大学院工学研究科量子工学、名古屋, (2005.6.9).

84. 齋藤 理一郎: “カーボンナノチューブのラマン分光、蛍光分光による評価 (招待講演)”，CPC 研究会，総評会館、お茶の水、東京, (2005.6.17).

85. R. Saito: “Raman and Photoluminescence intensity of single wall carbon nanotubes (invited)”，Nanotube lunch at the RLE House, MIT，Boston, USA, (2005.7.17).

86. M. S. Dresselhaus, A. Jorio, R. Saito: “Carbon nanotube physics from Raman and photoluminescence processes (keynote) ”，1st Workshop on Nanotube Optics and Nanospectroscopy (WONTON 2005), Telluride Science Research Center, Telluride, Colorado, USA, (2005.7.17-20).

87. R. Saito, K. Sato, Y. Oyama, J. Jiang. A. Jorio, G. Dresselhaus, M. S. Dresselhaus: “Optical response of carbon nanotubes (invited)”，第 54 回 藤原セミナー，グランドホテルニュー王子、苫小牧, (2005.9.1-9.4).

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90. 齋藤 理一郎: “「ナノチューブの科学」—ナノテクノロジーはシリコンから炭素へ— (招待講演)”，平成基礎科学財団講演会、楽しむ科学教室，東京大学, (2005.10.22).

91. 齋藤 理一郎: “カーボンナノチューブのラマン分光を主とした物性 (招待講演)”，カーボンナノチューブを利用した複合材の開発研究会，愛知県科学技術交流財団, 名城大学, (2005.11.17).

92. 齋藤 理一郎: “カーボンナノチューブの科学 (招待講演)”，麗和セミナー，埼玉県立浦和高等学校，埼玉, (2005.12.16).

93. R. Saito, J. Jiang, S. Roche, K. Sasaki, S. Murakami, K. Sato, Y. Oyama: “Magnetic properties of carbon nanotubes and nanographite (invited)”，International Workshop on High Magnetic Field Research, National Institute for Materials Science, Tsukuba, (2006.1.17-20).

94. 齋藤 理一郎: “カーボンナノチューブの単分子分光と光励起電子の緩和機構 (招待講演)”，平成 18 年春季応用物理学会シンポジウム「ナノサイエンスとしてのカーボンナノチューブ研究」，武蔵工業大学, (2006.3.22).

95. R. Saito, J. Jiang, J. S. Park, K. Sato: “Photoluminescence and resonance Raman intensity of single wall carbon nanotubes”，Symposium at HKUST (invited)，HKUST, Hong Kong, (2006.4.11-14).

96. R. Saito, J. Jiang, K. Sato, J. S. Park, A. Jorio, G. Ge. Samsonidze, G. Dresselhaus, M. S. Dresselhaus: “Excitonic effect on resonance Raman spectroscopy of single wall cabon nanotubes (invited)”，Workshop of Foundations and Applications of Raman Spectroscopy，Fortaleza, Brazil, (2006.9.24-26).

97. 齋藤 理一郎: “カーボンナノチューブの科学 (招待講演)”，仙台第三高等学校理数科研修会および日本物理学会東北支部出前授業，エスポワール宮城 仙台, (2006.10.4).

98. 齋藤 理一郎: “Excitonic states and resonance Raman spectroscopy of single wall carbon nanotubes (invited)”，HsunLee lecture，中国科学院金属材料研究所，瀋陽，中国, (2006.10.25).

99. 齋藤 理一郎: “ナノチューブの励起子と共鳴ラマンスペクトル (招待講演)”，東京工業大学 COE21 量子ナノ物理学研究会「カーボンナノチューブの光学応答」，東京工業大学百年記念館, (2007.3.22).

100. 齋藤 理一郎: “カーボンナノチューブ (招待講演)”，宮城野高等学校特別講座および日本物理学会東北支部出前授業，宮城野高等学校 仙台, (2007.5.26).

101. R. Saito, J. Jiang, K. Sato, J. S. Park, G. Dresselhaus, M. S. Dresselhaus: "Exciton-phonon interaction and Raman intensity of carbon nanotubes (invited)", 2nd Workshop on Nanotube Optics and Nanospectroscopy, Wonton 2007, Lord Elgin Hotel, Ottawa, Canada, (2007.6.4-7).

102. A. Jorio, P. T. Araujo, I. O. Maciel, P. B. C. Pesce, L. M. Moreira, M. A. Pimenta, M. S. Dresselhaus, J. Jiang, R. Saito, S. Tretiak, S. Doorn: "The optical transitions for single wall carbon nanotubes up to 4nm diameter (invited)", 2nd Workshop on Nanotube Optics and Nanospectroscopy, Wonton 2007, Lord Elgin Hotel, Ottawa, Canada, (2007.6.4-7).

103. 齋藤 理一郎: "Exciton in single wall carbon nanotubes (invited)", Semiconductor science and technology forum, 中国科学院半導体研究所, (2007.7.26).

104. R. Saito, K. Sato, J. Jiang, J. S. Park, W. Izumida, Y. Miyauchi, G. Dresselhaus, M. S. Dresselhaus: "Excitonic properties of single wall carbon nanotubes (invited)", A3 Foresight Program (Meeing and Summer School) in Beijing, Tsinghua University, Beijing, China, (2007.7.25-29).

105. 齋藤 理一郎: "カーボンナノチューブの科学 (招待講演)", 仙台第三高等学校理数科研修会および日本物理学会東北支部出前授業, 仙台第三高等学校 仙台, (2007.10.3).

106. 齋藤 理一郎: "カーボンナノチューブの励起子とラマン分光 (招待講演)", Nano Structured Materials Seminar, 名古屋大学理学部, (2007.11.2).

107. R. Saito: "Excitonic properties of single wall carbon nanotubes (invited)", YKIS 2007 "Interaction and Nanostructural Effects in Low-Dimensional Systems, Shiran Kaikan, Kyoto University, (2007.11.16).

108. 齋藤 理一郎: "カーボンナノチューブの科学 (招待講演)", 第 45 回東北地区高等学校物理教育研究会, 仙台第二高等学校北陵館, (2007.12.16).

109. 齋藤 理一郎: "ナノチューブとグラフェン (招待講演)", 第 20 回佐々木シンポジウム, 東京大学山上会館, (2007.12.21-22).

110. R. Saito: "Exciton and resonance Raman spectroscopy of single wall carbon nanotubes", India-Japan Cooperative Science Programme: Recent Trends in Molecular Materials Research (invited), Hotel Smudra, Kovalam, Kerala, India, (2008.1.20-22).

111. 齋藤 理一郎, K. Sato, J.S. Park, K. Sasaki, G. Dresselhaus, M. S. Dresselhaus: "Excitonic properties and Raman spectroscopy of single wall carbon nanotubes (invited)", International Carbon Nanotube Conference in NU, Nagoya University, Nagoya, (2008.2.14-15).

112. 齋藤 理一郎: "カーボンナノチューブの科学にようこそ - 円筒形物質の発見と使い方 - (招待講演) ", 第 33 回東北大学サイエンスカフェ, 仙台メディアテーク、仙台, (2008.4.25).

113. 齋藤 理一郎: "カーボンナノチューブの世界 (招待講演)", 宮城県高等学校理科研究会講演会, 青年文化センター、仙台, (2008.5.9).

114. 齋藤 理一郎: "カーボンナノチューブのラマン分光による試料評価と最近の研究動向 (招待講演)", カーボンナノ材料研究会, 大阪科学技術センター、大阪, (2008.5.19).

115. R. Saito: "Carbon Nanotubes (Invited Talk)", Nano Japan Program, 2008, 百年記念館 東工大 大岡山キャンパス 東京, (2008.5.22).

116. 齋藤 理一郎: "カーボンナノチューブの世界にようこそ (招待講演)", 分子科学フォーラム, 自然科学研究機構 分子科学研究所 岡崎, (2008.6.11).

117. R. Saito, K. Sato, J. S. Park, K. Sasaki, J. Jiang, G. Dresselhaus, M. S. Dresselhaus: "Dark and bright exciton energies of carbon nanotubes (keynote Lecture)", Carbon 2008, Hotel Metropolitan Nagano, (2008.7.13-18).

118. 齋藤 理一郎: "ラマン分光を用いたナノカーボンの評価と応用 (招待講演)", ATI 第 3 回合同研究会, メトロポリタン長野, (2008.10.31).

119. R. Saito, K. Sato: "Dark Excitons of Single Wall Carbon Nanotubes (invited)", The 5th Japan-Korea Symposium on Carbon Nanotubes, Haeundae Grand Hotel, Busan, Korea, (2008.11.9-12).

120. R. Saito: "Edge states, Electron-phonon interaction and Raman spectroscopy of graphene and carbon nanotubes (invited talk)", International Symposium on Graphene Devices, ISGD2008, Aizu University, (2008.11.17-19).

121. R. Saito: “Exiton states and phonon softening phenomena in single wall carbon Nanotubes (invited)”, International Winterschool on Electronic Properties of Novel Materials, Kirchberg, Austria, (2009.3.7-14).

122. 齋藤 理一郎: “物理学の世界 - カーボンナノチューブの世界 - (招待講演)”, 学問の世界, 宮城野高校, (2009.5.23).

123. R. Saito: “Welcome to Nanotube World (invited lecture)”, Seminar at Nano Japan Project 2009, Tokyo Sanuki Club, (2009.5.28).

124. R. Saito: “Exciton effect and phonon softening effect in the Raman spectroscopy of single wall carbon nanotubes (invited)”, 3rd workshop on nanotube optics and nanospectroscopy, WONTON09, Matsushima, Japan, (2009.6.7-6.10).

125. R. Saito: “Welcome to Nanotube World (invited)”, Tohoku University Summer Program, Tohoku University International Exchange Center, (2009.8.4).

126. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待講演)”, 岩手県教員免許状更新講習, 岩手県立総合教育センター, 花巻市, (2009.8.19).

127. R. Saito: “Exciton environmental effect on Raman spectroscopy of single wall carb on nanotubes”, 11th International Conference on Advanced Materials (ICAM 2009, invited), Rio de Janeiro, Brazil, (2009.9.20-25).

128. R. Saito: “Phonon softening phenomena in graphene and carbon nanotubes”, 2009 RIEC Cooperative Research Project on “Control and Elucidation of Growth Mechanism of Graphene for device applications in the next generation (invited), Research Institute of Electron Communications, Tohoku University, (2009.10.6).

129. R. Saito: “グラフェン・ナノカーボンのラマン分光”, 物性研短期研究会 (招待講演), 物性研究所、東京大学, (2009.10.22-24).

130. R. Saito: “Phonon softening effect and exciton environmental effect in Raman spectroscopy of single wall carbon nanotubes (invited)”, The 6th Korea-Japan symposium on carbon nanotubes (KJ6), Culture Resort Festone, Ginowan, Okinawa, (2009.10.25-28).

131. R. Saito: “Kohn anomaly effect in Raman spectroscopy of graphene and metallic single wall carbon nanotubes”, The DST/JSPS workshop on Physics and Chemistry of Graphene (invited), Bangalore, India, (2009.11.17-20).

132. R. Saito: “東北大学理学部, 大学院で活躍するための黄金率とカーボンナノチューブの世界 (招待講演)”, 平成 21 年度東北大学学部学科説明会, 仙台第一高校, (2009.12.4).

133. R. Saito: “Carbon Nanotubes; Physical properties and its applications”, Shanhai nanocarbon forum (invited), Shanhai Univ., (2009.12.7-8).

134. 齋藤 理一郎: “ナノチューブ、ナノカーボンの共鳴ラマン分光 (チュートリアル, invited)”, 第 38 回フラーレン・ナノチューブ総合シンポジウム, 名城大学, (2010.3.2-4).

135. R. Saito: “Welcome to Nanotube World (invited lecture)”, Seminar at Nano Japan Project 2009, Tokyo Sanuki Club, (2010.6.4).

136. 齋藤 理一郎: “ナノカーボン研究の展開 - グラフェンからナノチューブまで - (招待講演)”, 新世代研究所研究報告会, お茶の水, (2010.6.9).

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137. R. Saito, A. R. T. Nugraha, K. Sato, A. Jorio, P. T. Araujo, G. Dresselhaus, M. S. Dresselhaus: “Exciton environmental effect of single wall carbon nanotubes (invited)”, Eleventh International Conference on the Science and Application of Nanotubes (NT10), Hilton Bonaventure, Montreal, Canada, (2010.6-27-7.2).

138. R. Saito: “Raman spectroscopy of graphene and single wall carbon nanotubes (invited)”, Nanocarbon Photonics and Optoelectronics, Koli, North Karelia, Finland , (2010.08.01-06).

139. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待講演)”, 岩手県教員免許状更新講習, 岩手県立総合教育センター, 花巻市, (2009.8.10).

140. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待講演)”, 出前講座『ユニバーサイエンス』2010, 青森県立三本木高等学校, 十和田市, 青森県, (2010.10.20).

141. R. Saito: “Characterization of graphene edge by Raman spectroscopy (invited)”, International Symposium on Graphene Devices (ISGD2010), Tohoku Univ. Sendai, (2010.10.27-29).

142. R. Saito: “Raman spectroscopy of graphene edfe and carbon nanotubes (invited)”, A3 Symposium on Emerging Materials 2010: Nanocarbons and Nanowires for Energy, Core Riviera Hotel, Chonju, Korea, (2010.11.7-11).

143. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ（招待講演）”, 情報工学専攻特別講義, 仙台高等専門学校、愛子, (2010.11.24).

144. R. Saito, A. R. T. Nugraha, K. Sato, K. Sasaki, P. T. Araujo, A. Jorio, G. Dresselhaus, M. S. Dresselhaus: “Exciton and phonon softening phenomena of carbon nanotubes and graphene (invited)”, 2010.12.15-20,

, (Hawaii Convention center, Hawaii, USA).

145. R. Saito, K. Sato, K. Sasaki, C. Cong, Y. Ting G. Dresselhaus, M. S. Dresselhaus: “Raman spectroscopy of graphene (invited)”, Graphene Workshop in Tsukuba, Okura Frontier Hotel, Tsukuba, (2011.1.17-18).

146. R. Saito, A. R. T. Nugraha, K. Sato, G. Dresselhaus, M. S. Dresselhaus: “Coherent Phonon Spectroscopy of Carbon nanotubes (invited)”, The 3rd Nano Carbon meeting, Advanced Technology Institution, Ochanomizu, (2011.1.21).

147. 齋藤 理一郎, A. R. T. Nugraha, K. Sato, K. Sasaki, C. Conxiao, Y. Ting, G. Dresselhaus, M. S. Dresselhaus: “Raman and coherent phonon spectroscopy of nanotube and edge of graphene (invited)”, 4th Workshop on Nanotube optics and nanoscpectroscopy (Wonton’11), University of Bordeaux, Talence, Fance, (2011.5.29-6.1).

148. R. Saito, A. R. T. Nugraha, K. Sato, K. Sasaki, C. Conxiao, Y. Ting, G. Dresselhaus, M. S. Dresselhaus: “Electron and phonon of graphene related materials (invited talk)”, Tutorial in 2011 International Conference on Solid State Devices and Materials (SSDM 2011), Nagoya University, Nagoya, (2011.9.27).

149. R. Saito: “Coherent phonon spectroscopy of single wall carbon nanotubes (invited talk)”, PIRE kick-off meeting, Rice University, USA, (2011.10.7).

150. R. Saito, A. R. T. Nugraha, K. Sato, K. Sasaki, C. Conxiao, Y. Ting, G. Dresselhaus, M. S. Dresselhaus: “Raman and coherent phonon spectroscopy of nanotube and graphene (invited)”, 2011 A3 Symposium of Emerging Materials: Nanomaterials for energy and environments, Ruihao International Hotel, Urumqi, China, (2011.10.13-15).

151. R. Saito: “Raman spectroscopy of graphene (invited talk)”, Seminar at Key Laboratory for Anisotropy and Texture of Materials, North Eastern University(東北大学), ShenYang, China, (2011.11.2).

152. R. Saito: “Raman spectroscopy of graphene (invited talk)”, IMR Seminar, Institute of Metal Institute, ShenYang, China, (2011.11.2).

153. R. Saito, A. R. T. Nugraha, K. Sato, R. Endo: “Electron-phonon Interaction for Coherent Phonon Modes and Delay of Optical Pulse in Fibonacci Multi-layers (invited talk)”, International Symposium on Terahertz Nanoscience (TeraNano 2011), Nakanoshima Center, Osaka, (2011.11.24-25).

154. 齋藤 理一郎: “ナノカーボン研究 25 年とグラフェン研究の切り口 (招待講演)”, ATI 第 6 回合同研究会及び 25 周年記念会, 新世代研究所, (2011.12.9).

155. R. Saito: “Progress of Raman spectroscopy of carbon nanotubes (invited)”, Workshop on Carbon Nanotube in Commemoration of the 20th Anniversary of its Discovery (”2011-CNT20”), The International House of Japan, Tokyo, (2011.12.12-13).

156. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待講演)”, 東北活性化研究センター出前授業, 青森県立三沢高校, (2011.12.21).

157. 齋藤 理一郎: “単層カーボンナノチューブにおける電子ラマン分光スペクトル (招待講演)”, 新世代研究所第 3 回ナノカーボン研究会, 福島県高湯温泉玉子湯, (2012.1.30-31).

158. R. Saito, K. Sato, K. Sasaki, C. Cong, Y. Ting, G. Dresselhaus, M. S. Dresselhaus: “Raman spectroscopy of few-layes graphenes and their edges (Invited talk)”, JSPS/DST India-Japan SAympojiun on Graphene, Tokyo Institute of Technology, (2012.2.29-3.2).

159. 齋藤 理一郎, 佐藤健太郎: “ラマン分光による複数層グラフェンの構造の決定 (招待講演)”, 通研共同プロジェ

クト研究会「次世代デバイス応用を企図したグラフェン形成機構の解明及び制御の研究」，東北大学電気通信研究所, (2012.2.23).

160. R. Saito: “Raman spectroscopy of double and triple layer graphene(invited)”，2001 Material Research Society Spring meeting，Moscone West Convention Center, San Francisco, USA, (2012.4.9-13).

161. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待)”，日本物理学会東北支部出前授業，宮城県立宮城第一高等学校, (2012.5.28).

162. R. Saito: “Welcome to Nanotube World(invited)”，NSF Nano Japan Program，Sanuki Club，Tokyo, (2012.5.29).

163. R. Saito: “Raman spectroscopy of nanotube and graphene (invited talk)”，Department Seminar of Applied Physics，Aalto University，Nanotalo，Puumiehenkuja 2, Finland, (2012.6.7).

164. R. Saito: “Optical characterization of nanotube and graphene (invited)”，The 2nd Workshop on Nanoscience in Taiwan，Cheng Kung University, Tainam, Taiwan, (2012.7.4-7).

165. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待)”，出前講座『ユニバーサイエンス』2012，宮城県立名取北第一高等学校, (2012.7.13).

166. R. Saito, A. R. T. Nugraha, K. Sato, G. Sandaers, C. Stanton C. Conxiao, Y. Ting, G. Dresselhaus, M. S. Dresselhaus (invited lecture): “Raman and coherent phonon spectroscopy of nanotube and graphene”，The Third International Workshop on Nanocarbon Photonics and Optoelectronics，Huhmari, Polvijarvi, North Karelia, Finland, (2012.7.29-8.4).

167. 齋藤 理一郎: “ラマン分光によるナノカーボンの分析 (招待講演・チュートリアル)”，2012 年 秋季 第 73 回応用物理学会学術講演会，松山大学・愛媛大学, (2012.9.11).

168. R. Saito, K. Sato, A. R. T. Nugraha: “Optical properties of nanotubes and graphene (invited)”，2012 A3 Symposium of Emerging Materials: Nanomaterials for Energy and Environments - ATI International Forum，Tohoku University, Sendai, Japan, (2012.10.29-31).

169. R. Saito: “Optical properties of carbon nanotubes and graphene (invited)”，2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

170. 齋藤 理一郎: “グラフェンとカーボンナノチューブのラマン分光理論 (招待講演)”，日本物理学会第 68 回年次大会 領域 7 領域 4 合同シンポジウム，広島大学, (2013.3.26-29).

171. R. Saito, K. Sato, H. Hasdeo, A. R. T. Nugraha: “Coherent phonon and Raman spectroscopy of single wall carbon nanotubes (invited)”，Building blocks for carbon-based electronics: from molecules to nanotubes，University of Regensburg, (2013.4.10-12).

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178. R. Saito: “Raman spectroscopy in single-layer and twisted bilayer graphene (invited)”, IEEE Nanotechnology Materials and Devices Conference (NMDC 2013), Shangri-la Hotel, Tainan, Taiwan, (2013.10.7).

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180. R. Saito: “Raman spectroscopy of graphene and nanotubes (invited)”, IAS/School of Science Joint Lecture, Hong Kong University of Science and Technology, HKUST, Hong Kong, (2014.3.17).

181. R. Saito, E. H. Hasdeo, K. Sato, H. H. Guo: “Raman spectroscopy of graphene and atomic layer materials (invited)”, RIEC symposium on Graphene, Tohoku University, (2014.6.11).

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188. 齋藤 理一郎: “新しい原子層物質とその物性 (招待講演)”, 第 5 回フラーレン・ナノチューブ・グラフェンに関する若手研究会, 北九州国際会議場、小倉, (2015.9.6).

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199. R. Saito, E. H. Hasdeo, Y. Tatsumi, A. R. T. Nugraha, H. Guo, T. Yang: “Raman spectroscopy of atomic layer materials (plenary talk)”, XXV International conference on Raman spectroscopy (ICORS 2016), Fortaleza, Brazil, (2016.8.14-19).

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206. R. Saito: “Circular Dichroism of single wall carbon nanotubes (key note)”, 11th International Workshop on Metrology, Standardization and Industrial Quality of Nanotubes (MSIN17), Belo Horizonte, Brazil, (2017.6.30).

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209. R. Saito: “Controlling optical absorption of graphene in dielectric multilayers (invited)”, India-Japan symposium on Applications of Layered Materials: Advances and Perspectivea, Nagoya University, Nagoya, Japan, (2017.11.7-9).

210. R. Saito: “Early times of carbon nanotubes (invited)”, Celebrating Our Millie - The legacy and Impact of Mildred Dresselhaus, Room 10-250, Massachussetts Institute of Technology, USA, (2017.11.26).

211. R. Saito: “Controlling THz absorption of graphene in dielectric materials (invited)”, International Winterschool on Electronic Properties of Novel Materials (IWEPNM 2018), Kirchberg, Austria, (2017.3.20).

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213. R. Saito: “Conservation law of angular momentum in Raman spectroscopy using circularly polarized light (invited)”, 7th Workshop on Nanotube Optics and Nanospectroscopy, The Prince Hakone Lake Ashinoko, (2018.7.8-12).

214. R. Saito, Y. Tatsumi, K. Ghalamkari, T. Kaneko: “Conservation law of angular momentum in Raman spectra by circularly polarized light (invited)”, ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

215. R. Saito, M. S. Ukhtary, M. Maruoka: "Enhancement of electric field for measuring optical response in two-dimensional materials (invited)", The 9th Symposium on Emerging Materials: Nanomaterials for Energy and Electronics, Kyoto Univ. Uji Campus, (2018.10.29-31).

216. R. Saito: "Enhancement of electric field for measuring optical response in two-dimensional materials (invited)", 3rd Japan-EU Flagship Workshop on Graphene and Related 2D materials, Tohoku Univ., Katahira Campus, (2018.10.19-21).

217. R. Saito: "Raman spectroscopy of two-dimensional materials (invited)", Physics Colloquim of Zhejiang University, Zhejiang University, Hangzhou, China, (2019.3.22).

218. R. Saito: "Conservation law of angular momentum in helicity-changing Raman spectra (invited)", The seventh Taiwan international symposium on Raman spectroscopy (TIRS), National Taiwan Normal University, Taipei, Taiwan, (2019.6.27-28).

219. R. Saito: "Raman spectroscopy of two-dimensional materials (invited)", Taiwan association of Raman spectroscopy summer school (TARS), The Great Roots Forestry Spa Resort, Sanxia, New Taipei city, Taiwan, (2019.6.28-29).

220. R. Saito: "Controlling helicity of circularly polarized light in low-dimensional materials (invited)", The 14th Symposium on Computational Challenges in Two-Dimensional Materials and Nanotubes (CCTN19), Congress Centrum Wuerzburg, Wuerzburg, Germany, (2017.07.21-26).

221. R. Saito: "Optical Properties of nanotubes and two-dimensional materials by using circularly polarized light (invited)", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya Univerity, Nagoya, (2019.9.03-05).

222. R. Saito: "Tunable circular dichroism and valley polarization in two dimensional materials (invited)", Recent progress in graphene and 2D materials research (RPGR2019), Kunibiki Messe, Matsue, (2019.10.6-10).

223. R. Saito: "Tunable spin-polarization, pseudo-spin-polarization, and valley-polarization in the two-dimensional materials (invited)", The 10th A3 symposium on emerging materials: nanomaterials for electronics, energy and environment, Sungkyunkwan University, Korea, (2019.10.26-30).

224. R. Saito: "原子層材料における円偏光発光 (招待講演)", 第 23 回ＶＢＬシンポジウム, 名古屋大学, (2019.11.6-7).

225. 齋藤 理一郎: "カーボンナノチューブの世界にようこそ (出前授業)", 秋田県立花輪高等学校大学模擬講義, 秋田県立花輪高等学校, (2019.11.13).

226. R. Saito: "Edge plasmon of two-dimensional materials (invited)", The 4th Graphene Flagship EU-Japan Workshop on Graphene and related 2D materials, Palazzo della Carovana, Scuola Normale Superiore, Pisa, Italy, (2019.11.17-20).

227. R. Saito: "Helicity-changing Raman spectra in two-dimensional materials (Plenary)", International symposium on physical properties for nano functional materials (ISNFM 2020), Liaoning Shihua University (on-line), (2020.7.4-5).

228. 齋藤 理一郎: "グラフェンと 2 次元物質の基礎と 2020 年代の重点課題（招待講演）", 2020 年第 81 回応用物理学会秋季学術講演会チュートリアル, Zoom による Online, (2020.9.8).

229. 齋藤 理一郎: "原子層物質における円偏光物性（招待講演）", 日本物理学会２０２０年秋季大会、シンポジウム『グラフェン物性科学の新展開』, Zoom による Online, (2020.9.10).

230. 齋藤 理一郎: "カーボンナノチューブの世界にようこそ (出前授業)", 仙台市立仙台星陵中教育学校　一日大学, 仙台市立仙台星陵中教育学校, (2020.11.13).

231. R. Saito: "Optical properties of carbon nanotube and two-dimensional material (keynote)", International Conference on the Science and Application of Nanotubes and Low-Dimensional Materials (NT21), On-line by Zoom, Rice University, (2021.6.6-11).

232. R. Saito: "30 years of Carbon Nanotubes with FNTG (invited)", The 61st Fulllerene Nanotube Graphene general symposium, On-line by Zoom, Osaka University, (2021.9.1-3).

233. 齋藤 理一郎: "ナノチューブ研究 30 年と展望 (招待講演)", 日本物理学会 2021 年秋季大会、カーボンナノチューブ発見 30 周年記念シンポジウム, オンライン大会, (2021.9.20-23).

234. R. Saito: “31 years of research on carbon nanotubes (invited)”, 2022 Summer Meeting on Interdisciplinary Materials Science, Hanoi University of Science and Technologh, Vietnam, (2022.7.19).

235. R. Saito, N. T. Hung, R. Natsui, Y. Nakanishi, Y. Miyata: “Raman spectra of In-intercalated WTe nanowires (invited)”, 12th A3 Symposium on Emerging Materials: Nanomaterials for Electronics, Energy, and Environment, Waseda University, Tokyo, (2022.11.7-9).

236. R. Saito: “Challenges of carbon nanotubes with Prof. Millie Dresselhaus and Prof. Gene Dresselhaus (keynote) ”, Workshop in honor of Prof. Millie and Gene Dresselhaus & Celebrating the retirement of Prof. Riichiro Saito, 34-401, MIT, Boston, USA, (2023.2.20).

237. R. Saito: “Progress and Perspective of Carbon Nanotub (invited)”, The 64th Fullerenes-Nanotubes-Graphene General Symposium, Nagoya University, Nagoya, (2023.3.1-3).

238. 齋藤 理一郎: “カーボンナノチューブとともに（最終講義）”, 最終講義、物理学専攻、東北大学, Tohoku University, Sendai, (2023.3.10).

239. R. Saito: “Raman spectra and optical properties of nanotubes, TMD nanowire, and 2D materials (invited)”, Workshop on Nanomaterial, National Taiwan Normal University, Taipei, (2023.3.23).

240. R. Saito: “Five Challenges of Carbon Nanotubes (invited)”, Xinda lectures series, Pekin University, China, (2023.6.23).

241. R. Saito: “Five Challenges of Carbon Nanotubes (invited)”, Special workshop at IMR, Institute of Metal Research, ShenYang, China, (2023.6.27).

242. R. Saito: “Five Challenges of Carbon Nanotubes (invited)”, Lectures series to the graduate students, Liaoning Petrochemical University, Choshun, China, (2023.6.27).

243. 齋藤 理一郎: “グラフェンに関する 10 個のストーリー (invited)”, 物理学会講話, online, (2023.7.1).

244. 齋藤 理一郎: “低次元半導体物質の研究戦略ーナノチューブ、２次元物質ー (基調講演)”, 第 42 回電子材料シンポジウム, The Kashihara, 奈良県橿原市, (2023.10.11).

245. R. Saito: “Progress on Resonant Raman spectroscopy of 1D and 2D materials (invited)”, Seminar in N-Center, Sungkyunkwan University, N-Center, Sungkyunkwan University, Suwon, Korea, (2023.10.27).

246. 齋藤 理一郎: “BN チューブ内包カーボンナノチューブのラマン分光 (招待講演)”, ATI コンファレンス, Royal Hotel 八ヶ岳, 山梨県北杜市, (2023.11.13).

247. 齋藤 理一郎: “１次元２次元半導体物質の戦略と CVD (基調講演）”, 化学工学会 CVD 反応分科会 第 39 回シンポジウム, 62W 号館, 早稲田大学, (2023.11.14).

248. R. Saito: “30 years of Carbon Nanotubes (invited)”, Colloquim in National Taiwan University, National Taiwan University, Taipei, Taiwan, (2023.11.28).

249. R. Saito: “Ten stories of graphene (invited)”, Physics Colloquim in National Taiwan Normal University, National Taiwan Normal University, Taipei, Taiwan, (2023.11.29).

250. 齋藤 理一郎: “ナノチューブのらせん度に依存した光物性 (招待講演)”, 第 85 回応用物理学会学術講演会, 朱鷺メッセ, 新潟, (2024.9.16-20).

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601. R. Saito, A. R. T. Nugraha, K. Sato, R. Endo: “Electron-phonon Interaction for Coherent Phonon Modes and Delay of Optical Pulse in Fibonacci Multi-layers (invited talk)”, International Symposium on Terahertz Nanoscience (TeraNano 2011), Nakanoshima Center, Osaka, (2011.11.24-25).

602. 齋藤 理一郎: “ナノカーボン研究 25 年とグラフェン研究の切り口 (招待講演)”, ATI 第 6 回合同研究会及び 25 周年記念会, 新世代研究所, (2011.12.9).

603. 佐藤健太郎, 齋藤 理一郎: “ラマン分光による二層と三層グラフェンの積層構造の評価”, 第 2 回ナノカーボン研究会, 新世代研究所, (2011.12.9).

604. 齋藤 理一郎: “グラフェンの Raman 分光で従来と逆のゲート電圧依存性を示すモード”, 第 2 回ナノカーボン研究会, 新世代研究所, (2011.12.9).

605. R. Saito: “Progress of Raman spectroscopy of carbon nanotubes (invited)”, Workshop on Carbon Nanotube in Commemoration of the 20th Anniversary of its Discovery (”2011-CNT20”), The International House of Japan, Tokyo, (2011.12.12-13).

606. 齋藤 理一郎: “カーボンナノチューブの世界にようこそ (招待講演)”, 東北活性化研究センター出前授業, 青森県立三沢高校, (2011.12.21).

607. 齋藤 理一郎: “単層カーボンナノチューブにおける電子ラマン分光スペクトル (招待講演)”, 新世代研究所第 3 回ナノカーボン研究会, 福島県高湯温泉玉子湯, (2012.1.30-31).

608. R. Saito, K. Sato, K. Sasaki, C. Cong, Y. Ting, G. Dresselhaus, M. S. Dresselhaus: “Raman spectroscopy of few-layers graphenes and their edges (Invited talk)”, , Tokyo Institute of Technology, (2012.2.29-3.2).

609. 齋藤 理一郎, 佐藤健太郎: “ラマン分光による複数層グラフェンの構造の決定 (招待講演)”, 通研共同プロジェクト研究会「次世代デバイス応用を企図したグラフェン形成機構の解明及び制御の研究」, 東北大学電気通信研究所, (2012.2.23).

610. P. T. Araujo, D. Mafra, K. Sato, R. Saito, J. Kong, M. S. Dresselhaus: “Phonon self-energy corrections to non-zero wavevector phonon modes in single-layer graphene”, APS March Meeting 2012, Boston, Massachusetts, (2012.2.27-3.2).

611. J. Rodriguez-Nieva, R. Saito, M. S. Dresselhaus: “Isotope impurity doping in graphene”, APS March Meeting 2012, Boston, Massachusetts, (2012.2.27-3.2).

612. D. Mafra, P. T. Araujo, K. Sato, R. Saito, M. S. Dresselhaus, J. Kong: “Using the G’ Raman cross-section to understand the phonon dynamics in bilayer graphene systems”, APS March Meeting 2012, Boston, Massachusetts, (2012.2.27-3.2).

613. R. Saito, K. Sato, K. Sasaki, C. Conxiao, Y. Ting, G. Dresselhaus, M. S. Dresselhaus: “Raman spectroscopy of few-layers graphene and their edges (invited)”, JSPS-DST Workshop on graphene and related materials, Tokyo Institute of Technology, (2012.2.29-3.2).

614. R. Saito, K. Sato, D. L. Mafra, P. T. Araujo, M. S. Dresselhaus: “Laser Power dependence of G’ Raman intensity in bilayer graphene”, The 42nd Fullerenes-Nanotubes-Graphene General Symposium, Takeda Frontier Science Hall, The University of Tokyo, (2012.3.6-8).

615. A. R. T. Nugraha, G. Sanders, K. Sato, R. Saito: “Coherent phonon spectroscopy of RBM and RBLM phonons in carbon nanotubes and graphene nanoribbons”, The 42nd Fullerenes-Nanotubes-Graphene General Symposium, Takeda Frontier Science Hall, The University of Tokyo, (2012.3.6-8).

616. K. Sato, D. L. Mafra, P. T. Araujo, R. Saito, M. S. Dresselhaus: “Inner and outer double Raman scattering process of graphene”, The 42nd Fullerenes-Nanotubes-Graphene General Symposium, Takeda Frontier Science Hall, The University of Tokyo, (2012.3.6-8).

617. P. Tapsanit, K. Sato, R. Saito: “Enhancement and selection rules of near field optical transition in SWNT”, The 42nd Fullerenes-Nanotubes-Graphene General Symposium, Takeda Frontier Science Hall, The University of Tokyo, (2012.3.6-8).

618. 泉田渉, Anton Vikström, 齋藤 理一郎: “ナノチューブ量子ドットのバンド傾斜による 2 重- 4 重縮退遷移”, 日本物理学会　第 67 回年次大会, 関西学院大学西宮上ケ原キャンパス, (2012.3.24-27).

619. 齋藤 理一郎, 佐藤健太郎, P. T. Araujo, D. L. Marfa, M. S. Dresselhaus: “単層グラフェンのラマンスペクトルのゲート電圧依存性”, 日本物理学会　第 67 回年次大会, 関西学院大学西宮上ケ原キャンパス, (2012.3.24-27).

620. 佐藤健太郎, 齋藤 理一郎: “積層構造がずれた二層グラフェンにおける G バンド強度”, 日本物理学会　第 67 回年次大会, 関西学院大学西宮上ケ原キャンパス, (2012.3.24-27).

621. R. Saito: “Raman spectroscopy of double and triple layer graphene(invited)”, 2012 Material Research Society Spring meeting, Moscone West Convention Center, San Francisco, USA, (2012.4.9-13).

622. R. Saito: “カーボンナノチューブの世界にようこそ (招待)”, 日本物理学会東北支部出前授業, 宮城県立宮城第一高等学校, (2012.5.28).

623. R. Saito: “Welcome to Nanotube World(invited)”, NSF Nano Japan Program, Sanuki Club, Tokyo, (2012.5.29).

624. R. Saito: “Raman spectroscopy of nanotube and graphene (invited talk)”, Department Seminar of Applied Physics, Aalto University, Nanotalo, Puumiehenkuja 2, Finland, (2012.6.7).

625. R. Saito, K. Sato, P. Araujo, D. Mafra, M. Dresselhaus: “Opposite behavior of the Kohn anomaly effect in double resonance Raman spectroscopy of metallic carbon nanotube and graphene”, 13th International Conference on the Science and Application of Nanotubes (NT12), Brisbane Convention and Exhibition Centre, Australia, (2012.6.23-29).

626. K. Sato, Chunxiao Cong, Ting Yu, R. Saito: “G band Raman intensity of twisted bilayer graphene”, 13th International Conference on the Science and Application of Nanotubes (NT12), Brisbane Convention and Exhibition Centre, Australia, (2012.6.23-29).

627. C. Cong, Y. Ting, K. Sato, J. Shang, R. Saito, G. Dresselhaus, M. S. Dresselhaus: “Raman Characterization of ABA- and ABC- Stacked Trilayer Graphene”, the International Conference of Young Researchers on Advanced Materials (ICYRAM2012), MATRIX Building, Biopolis Shared Facilities, Singapore, (2012.7.1-6).

628. R. Saito: “Optical characterization of nanotube and graphene (invited)”, The 2nd Workshop on Nanoscience in Taiwan, Cheng Kung University, Tainan, Taiwan, (2012.7.4-7).

629. R. Saito: “カーボンナノチューブの世界にようこそ (招待)”, 出前講座『ユニバーサイエンス』2012, 宮城県立名取北第一高等学校, (2012.7.13).

630. R. Saito, A. R. T. Nugraha, K. Sato, G. Sanders, C. Stanton C. Conxiao, Y. Ting, G. Dresselhaus, M. S. Dresselhaus (invited lecture): “Raman and coherent phonon spectroscopy of nanotube and graphene”, The Third International Workshop on Nanocarbon Photonics and Optoelectronics, Huhmari, Polvijarvi, North Karelia, Finland, (2012.7.29-8.4).

631. K. Sato, 齋藤 理一郎, C. Cong, T. Yu, M. S. Dresselhaus: “積層構造がねじれた 2 層グラフェンにおける G バンド強度と結合状態密度”, 第 43 回フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東北大学, (2012.9.5-7).

632. E. H. Hasdeo, A. R. T. Nugraha, K. Sato, 齋藤 理一郎: “Theory of electronic Raman scattering in metallic single-walled carbon nanotube”, 第 43 回フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東北大学, (2012.9.5-7).

633. A. R. T. Nugraha, G. D. Sanders, C. J. Stanton, 齋藤 理一郎: “Excitonic effects on coherent phonons in single wall carbon nanotubes”, 第 43 回フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東北大学, (2012.9.5-7).

634. M. Bissett, W. Izumida, R. Saito, H. Ago: “Effect of Mechanical Strain on Polycrystalline Graphene”, 第 43 回フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東北大学, (2012.9.5-7).

635. 泉田 渉, 辰巳 由樹, 齋藤 理一郎: “有限長の金属単層ナノナノチューブにおけるディラックコーン傾斜とノギススペクトル”, 第 43 回フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東北大学, (2012.9.5-7).

636. 齋藤 理一郎: “ラマン分光によるナノカーボンの分析 (招待講演・チュートリアル)”, 2012 年 秋季 第 73 回応用物理学会学術講演会, 松山大学・愛媛大学, (2012.9.11).

637. R. Saito, K. Sato, A. R. T. Nugraha: “Optical properties of nanotubes and graphene (invited)”, 2012 A3 Symposium of Emerging Materials: Nanomaterials for Energy and Environments - ATI International Forum, Tohoku University, Sendai, Japan, (2012.10.29-31).

638. W. Izumida, Y. Tatsumi, R. Saito: “Tilting of Dirac cones and vernier spectrum in finite-length metallic single wall carbon nanotubes”, 2012 A3 Symposium of Emerging Materials: Nanomaterials for Energy and Environments - ATI International Forum, Tohoku University, Sendai, Japan, (2012.10.29-31).

639. K. Sato, R. Saito: “Raman spectra and enhancement of twisted bilayer graphene”, 2012 A3 Symposium of Emerging Materials: Nanomaterials for Energy and Environments - ATI International Forum, Tohoku University, Sendai, Japan, (2012.10.29-31).

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Emerging Materials: Nanomaterials for Energy and Environments - ATI International Forum, Tohoku University, Sendai, Japan, (2012.10.29-31).

641. E. H. Hasdeo, A. R. T. Nugraha, K. Sato, R. Saito: "Theory of electronic Raman scattering in metallic single wall carbon nanotubes", 2012 A3 Symposium of Emerging Materials: Nanomaterials for Energy and Environments - ATI International Forum, Tohoku University, Sendai, Japan, (2012.10.29-31).

642. R. Saito: "Optical properties of carbon nanotubes and graphene (invited)", 2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

643. A. Dimiev, G. Ceriotti, N. Behabtu, M. Pasquali, R. Saito, J. M. Tour: "Real-time monitoring of stage transitions in graphite intercalation compounds on micro-scale level", 2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

644. M. A. Bissett, W. Izumida, R. Saito, H. Ago: "Anomalous Raman behavior of CVD grown graphene under strain", 2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

645. J. F. Rodriguez-Nieva, R. Saito, M. S. Dresselhaus: "D-band Raman spectra for several types of defects in graphene", 2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

646. D. L. Mafra, J. Kong, K. Sato, R. Saito, M. S. Dresselhaus, P. T. Araujo: "Using the G' Raman cross-section to understand the phonon dynamics in bilayer graphene systems", 2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

647. D. L. Mafra, J. Kong, K. Sato, R. Saito, M. S. Dresselhaus, P. T. Araujo: "Using gate-modulated Raman scattering and electron-phonon interactions to probe single layer graphene: a new technique to assign phonon combination modes", 2012 MRS Fall meeting, Hynes Convention Center, Boston, USA, (2012.11.25-30).

648. R. Saito, Q. Caiyu, Y. Ting: "Resonance and interference effect of Raman spectroscopy of graphene in the magnetic field", 第 44 回 フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東京大学, (2013.03.11-13).

649. A. R. T. Nugraha, E. H. Hasdeo, R. Saito: "Exciton effects on coherent phonon spectroscopy of carbon nanotubes", 第 44 回 フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東京大学, (2013.03.11-13).

650. Y. Tatsumi, W. Izumida, R. Saito: "Vernier spectrum in finite-length armchair carbon nanotubes", 第 44 回 フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東京大学, (2013.03.11-13).

651. E. H. Hasdeo, A. R. T. Nugraha, K. Sato, R. Saito: "Electronic Raman scattering and origin of the Fano resonance in metallic carbon nanotubes", 第 44 回 フラーレン・ナノチューブ・グラフェン総合シンポジウム, 東京大学, (2013.03.11-13).

652. G. D. Sanders, C. J. Stanton, A. R. T. Nugraha, R. Saito: "Theory of coherent phonons in carbon nanotubes and graphene nanoribbons", APS March Meeting 2013, Baltimore, MA, USA, (2013.3.18-22).

653. P. T. Araujo, D. Mafra, K. Sato, R. Saito, J. Kong, M. S. Dresselhaus: "Unraveling the interlayer-related phonon self-energy renormalization in bilayer graphene", APS March Meeting 2013, Baltimore, MA, USA, (2013.3.18-22).

654. T. Yu, R. Saito, M. S. Dresselhaus: "Raman scattering of 2D materials", APS March Meeting 2013, Baltimore, MA, USA, (2013.3.18-22).

655. M. A. Bissett, W. Izumida, R. Saito, M. Tsuji, H. Ago: "Investigation of mechanical strain of polycrystalline graphene by Raman spectroscopy", 2013 年 第 60 回応用物理学会春季学術講演会, 神奈川工科大学, (2013.3.27-30).

656. 齋藤 理一郎: "グラフェンとカーボンナノチューブのラマン分光理論 (招待講演)", 日本物理学会第 68 回年次大会 領域 7 領域 4 合同シンポジウム, 広島大学, (2013.3.26-29).

657. R. Saito, K. Sato, H. Hasdeo, A. R. T. Nugraha: "Coherent phonon and Raman spectroscopy of single wall carbon nanotubes (invited)", Building blocks for carbon-based electronics: from molecules to nanotubes, University of Regensburg, (2013.4.10-12).

658. R. Saito, E. H. Hasdeo, A. R. T. Nugraha: "Exciton effects on coherent phonon and electronic Raman spectroscopy of single wall carbon nanotubes (invited)", 5th Workshop on Nanotube Optics and

Nanospectroscopy, Eldorado Hotel, Santa Fe, NM, USA, (2013.6.16-20).

659. M. A. Pimenta, L. G. Moura, G. S. N. Eliel, S. D. Costa, C. Fantini, P. Venezuela, R. S. Ruoff, L. Colombo, R. Saito, Po-Wen Chiu, W. S. Bacsa, M. S. Strano: "Resonance Raman spectroscopy of single-chirality (n,m) carbon nanotubes and in twisted bilayer graphene (invited)", 5th Workshop on Nanotube Optics and Nanospectroscopy, Eldorado Hotel, Santa Fe, NM, USA, (2013.6.16-20).

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661. 齋藤 理一郎: "グラフェンと複合原子層系の動き (招待講演)", (公財) 新世代研究所第 20 会研究報告会, 御茶ノ水カンファレンスセンター, (2013.7.5).

662. R. Saito: "Welcome to Nanotube World (invited)", Tohoku University Science Summer Projects, Tohoku University, (2013.7.10).

663. 佐藤健太郎, 齋藤 理一郎: "グラフェンとナノチューブの G' バンドのフェルミエネルギー依存性", 第 45 回フラーレン・ナノチューブ・グラフェン総合シンポジウム, 大阪大学, (2013.8.5-7).

664. R. Saito, K. Sato, C. Qiu, T. Yu, P. Chiu, M. Pimenta, M. S. Dresselhaus: "Magneto Raman spectroscopy of single layer graphene and resonance Raman spectroscopy of twiseted bilayer graphene (invited)", 5th International Conference on Recent Progress in Graphene Research (ROGR 2013), Tokyo Institute of Technology, (2013.9.10).

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666. G. S. N. Eliel, M. A. Pimenta, C. Fantini, R. Saito, K. Sato, P. W. Chiu: "Resonance Raman spectroscropy in twisted bilayer graphene", Graphene Brazil Meeting 2013, Buzios, Rio de Janeiro, (2013.9.22-25).

667. R. Saito: "Gate modulated Raman spectroscopy of single-layer and bilayer graphene", Advances and applications in carbon related nanomaterials: from pure to doping including heteroatom layers, Gran Hotel Rey Don Jaime, Castelldefels, Spain, (2013.9.23).

668. R. Saito: "Raman spectroscopy in single and bilayer graphene (invited)", Seminar at Institute Catala de Nanociencia i Nanotecnologia, ICN2 Building UAB, Barcelona, Spain, (2013.9.27).

669. R. Saito: "Raman spectroscopy in single-layer and twisted bilayer graphene (invited)", IEEE Nanotechnology Materials and Devices Conference (NMDC 2013), Shangri-la Hotel, Tainan, Taiwan, (2013.10.7).

670. R. Saito, A. R. T. Nugraha, E. H. Hasdeo, K. Sato: "Raman spectroscopy of metallic single wall nanotubes and doped graphene (invited)", 4th A3 Symposium on Emerging Materials: Nanomaterials for Energy and Electronics, Daemyung Resort, Jeju, Korea, (2013.11.10-14).

671. A. R. T. Nugraha, E. H. Hasdeo, R. Saito: "Exciton effects on coherent phonon dynamics in single wall carbon nanotubes", 4th A3 Symposium on Emerging Materials: Nanomaterials for Energy and Electronics, Daemyung Resort, Jeju, Korea, (2013.11.10-14).

672. E. H. Hasdeo, A. R. T. Nugraha, R. Saito: "Quantum interference effect in Raman spectra of metallic nanotubes", 4th A3 Symposium on Emerging Materials: Nanomaterials for Energy and Electronics, Daemyung Resort, Jeju, Korea, (2013.11.10-14).

673. K. Sato, R. Saito: "Fermi energy dependent Raman spectra and electron-phonon interaction of graphene", 4th A3 Symposium on Emerging Materials: Nanomaterials for Energy and Electronics, Daemyung Resort, Jeju, Korea, (2013.11.10-14).

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676. Ahmad R. T. Nugraha, Eddwi H. Hasdeo, R. Saito: “Coherent G-band phonons in single wall carbon nanotubes”，第 46 回フラーレン・ナノチューブ・グラフェン総合シンポジウム，東京大学, (2014.3.3-5).

677. Eddwi H. Hasdeo, Ahmad R. T. Nugraha, R. Saito: “Quantum interference effect in Raman spectra of metallic nanotubes and graphene”，第 46 回フラーレン・ナノチューブ・グラフェン総合シンポジウム，東京大学, (2014.3.3-5).

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679. R. Saito: “Raman spectroscopy of graphene and nanotubes (invited)”，IAS/School of Science Joint Lecture, Hong Kong University of Science and Technology，HKUST, Hong Kong, (2014.3.17).

680. 齋藤 理一郎, 佐藤 健太郎: “Twisting Bilayer Graphene における G バンドの共鳴 Raman 効果”，第 69 回日本物理学会年次大会，東海大学, (2014.3.27-30).

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683. R. Saito, E. H. Hasdeo, K. Sato, H. H. Guo: “Raman spectroscopy of graphene and atomic layer materials (invited)”，RIEC symposium on Graphene，Tohoku University, (2014.6.11).

684. A. R. T. Nugraha, E. H. Hasdeo, R. Saito, G. D. Sanders, C. Stanton: “Coherent G band phonons in single wall carbon nanotubes”，ATI 2014 Nano-Carbon Meeting，Yamagata-Zao, (2014.7.31-8.1).

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687. G. Huaihong, R. Saito, T. Yang, M. S. Dresselhaus, M. Yamamoto, R. Ishikawa, K. Ueno, K. Tsukagoshi: “Double resonance Raman modes in mono- and few-layer $MoTe_2$”，Zao14 Meeting，2014.7.31-8.1, (ATI 2014 Nano-Carbon Meeting)．Yamagata-Zao

688. M. Mizuno, R. Saito: “Anharmonic effects of phonons in carbon nanotubes”，ATI 2014 Nano-Carbon Meeting，Yamagata-Zao, (2014.7.31-8.1).

689. R. Okuyama, R. Saito: “Phonon amplification in carbon nanotube via transport through quantum dot”，ATI 2014 Nano-Carbon Meeting，Yamagata-Zao, (2014.7.31-8.1).

690. P. Machado, R. Saito: “Near field solution through finite element method”，ATI 2014 Nano-Carbon Meeting，Yamagata-Zao, (2014.7.31-8.1).

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817. R. Saito, Y. Tatsumi: "Conservation law of angular momentum in Raman spectroscopy using circularly polarized light", 7th Workshop on Nanotube Optics and Nanospectroscopy (Wonton 2018), Hakone Prince Hotel, Japan, (2018.7.9-12).

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819. N. T. Hung, A. R. T. Nugraha, R. Saito: "Improving thermoelectric performance of monolayer semiconductors beyond the confinement effect", 19th International Conference on the Science and Application of Nanotubes and Low-dimensional Materials (NT18), Pekin University, Beijing, China, (2018.7.15-20).

820. M. S. Ukhtary, H. Liu, S. Nulli, R. Saito: "Optical properties of multilayer dielectric stacks: Hidden symmetries and application to graphene", 19th International Conference on the Science and Application of Nanotubes and Low-dimensional Materials (NT18), Pekin University, Beijing, China, (2018.7.15-20).

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823. M. S. Ukhtary, R. Saito: "Transverse Magnetic and Transverse Electric Surface Waves in Silicene", ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

824. T. Shirakura, R. Saito: "Exciton-phonon coupling in MoS2 by Resonance Raman", ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

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826. F. R. Pratama, R. Saito: "Optical transition mechanism in tip-enhanced Raman spectroscopy of monolayer graphene", ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

827. Y. Iwasaki, R. Saito: "Chirality dependence of depolarization effect in single-wall carbon nanotubes", ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

828. M. S. Islam, R. Saito: "Doping effect on the electronic and vibrational properties of armchair graphene nanoribbons", ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

829. M. Maruoka, R. Saito: "THz antenna handling circularly polarized light", ATI Zao meeting, Yamagata Zao, (2018.8.1-2).

830. R. Saito, M. S. Ukhtary, M. Maruoka: "Enhancement of electric field for measuring optical response in two-dimensional materials (invited)", The 9th Symposium on Emerging Materials: Nanomaterials for Energy and Electronics, Kyoto Univ. Uji Campus, (2018.10.29-31).

831. M. S. Islam, N. T. Hung, A. R. T. Nugragha, R. Saito: "Electronic and vibrational properties of boron-doped armchair graphene nanoribbons", The 55th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 55), Tohoku University, Sendai, (2018.9.11-13).

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Fullerenes-Nanotubes-Graphene General Symposium (FNTG 55), Tohoku University, Sendai, (2018.9.11-13).

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847. R. Saito: "Controlling helicity of circularly polarized light in low-dimensional materials (invited)", The 14th Symposium on Computational Challenges in Two-Dimensional Materials and Nanotubes (CCTN19), Congress Centrum Wuerzburg, Wuerzburg, Germany, (2017.07.21-26).

848. R. Saito, D. Satco, A. R. T. Nugraha, M. S. Ukhtary, D. Kopylova, A. G. Nasibulin: "Optical spectroscopy of doped single wall carbon nanotubes", The 20th International Conference on the Science and Application of Nanotubes and Low-dimensional Materials (NT19), Congress Centrum Wuerzburg, Wuerzburg, Germany, (2017.07.21-26).

849. M. S. Ukhtary, M. Maruoka, R. Saito: "Edge plasmon in graphene ribbon", The 20th International Conference on the Science and Application of Nanotubes and Low-dimensional Materials (NT19), Congress Centrum Wuerzburg, Wuerzburg, Germany, (2017.07.21-26).

850. F. R. Pratama, M. S. Ukhtary, R. Saito: "Optical absorption in the two-dimensional hexagonal materials", The 20th International Conference on the Science and Application of Nanotubes and Low-dimensional Materials (NT19), Congress Centrum Wuerzburg, Wuerzburg, Germany, (2017.07.21-26).

851. R. Saito(invited): "Paradoxes in nano-devices", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

852. M. Maruoka, R. Saito: "Edge plasmon in rectangular antenna", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

853. X. Pang, R. Saito: "First order resonant Raman spectra of TaP", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

854. T. Wang, R. Saito: "Why does helicity of a phonon mode change in Raman spectroscopy of MoS_2", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

855. F. R. Pratama, R. Saito: "The Hall conductivity and circular dichroism", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

856. Y. Tian, R. Saito: "Enhancement of electric field by surface plasmon on hollow cylinder", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

857. N. T. Hung, R. Saito: "Polymer as an electrode of sodium-ion battery", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

858. M. S. Ukhtary, R. Saito: "Edge plasmon in graphene ribbon", ATI Zao meeting, Yamagata Zao, (2019.8.8-9).

859. R. Saito: "Optical properties of nanotubes and two-dimensional materials by using circularly polarized light (invited)", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya University, Nagoya, (2019.9.3-5).

860. N. T. Hung, A. R. T. Nugraha, R. Saito: "Designing two-dimensional tetradymites with 20% thermoelectric efficiency", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya University, Nagoya, (2019.9.3-5).

861. M. S. Ukhtary, M. Maruoka, R. Saito: "Edge plasmon in graphene ribbon", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya University, Nagoya, (2019.9.3-5).

862. F. R. Pratama, M. S. Ukhtary, R. Saito: "Role of the Hall conductivity in the optical absorption of circularly-polarized light", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya University, Nagoya, (2019.9.3-5).

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864. T. Wang, N. T. Hung, A. R. T. Nugraha, R. Saito: "Laser-energy dependent helicity-changing Raman spectra of MoS_2", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya University, Nagoya, (2019.9.3-5).

865. M. Maruoka, T. Maeda, M. S. Ukhtay, R. Saito: "Edge plasmon in rectangular antenna of graphene", The 57th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 57), Nagoya University, Nagoya, (2019.9.3-5).

866. R. Saito: "Tunable circular dichroism and valley polarization in two dimensional materials (invited)", Recent progress in graphene and 2D materials research (RPGR2019), Kunibiki Messe, Matsue, (2019.10.6-10).

867. M. S. Ukhtary, M. Maruoka, R. Saito: "In-plane rotation of electric field induced by edge-plasmon in a graphene nanoribbon", The 10th A3 symposium on emerging materials: nanomaterials for electronics, energy and environment, Sungkyunkwan University, Korea, (2019.10.26-30).

868. R. Saito: "原子層材料における円偏光発光 (招待講演)", 第 23 回ＶＢＬシンポジウム, 名古屋大学, (2019.11.6-7).

869. 齋藤 理一郎: "カーボンナノチューブの世界にようこそ (出前授業)", 秋田県立花輪高等学校大学模擬講義, 秋田県立花輪高等学校, (2019.11.13).

870. R. Saito: "Edge plasmon of two-dimensional materials (invited)", The 4th Graphene Flagship EU-Japan Workshop on Graphene and related 2D materials, Palazzo della Carovana, Scuola Normale Superiore, Pisa, Italy, (2019.11.17-20).

871. S. Wang, F. R. Pratama, M. S. Ukhtary, R. Saito: "Independent degrees of freedom in two-dimensional materials", The 58th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 58), University of Tokyo, Tokyo, (2020.3.15-17).

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874. N. T. Hung, R. Saito: "Thermal conductivity of low-cost thermoelectric Mg_3Bi_2", The 58th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 58), University of Tokyo, Tokyo, (2020.3.15-17).

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876. P. Xiaoqi, N. T. Hung, R. Saito: "First-principles calculation of exciton of transition metal dichalcogenide", The 58th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 58), University of Tokyo, Tokyo, (2020.3.15-17).

877. R. Saito: "Helicity-changing Raman spectra in two-dimensional materials (Plenary)", International symposium on physical properties for nano functional materials (ISNFM 2020), Liaoning Shihua University (on-line), (2020.7.4-5).

878. 齋藤 理一郎: "グラフェンと 2 次元物質の基礎と 2020 年代の重点課題（招待講演）", 2020 年第 81 回応用物理学会秋季学術講演会チュートリアル, Zoom による Online, (2020.9.8).

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881. S. Wang, M. S. Ukhtary, R. Saito: "Strain effect on circularly-polarized electroluminescence in transition metal dichalcogenides", The 59th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 59), On-line by Zoom, (2020.9.16-18).

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886. 齋藤 理一郎: "カーボンナノチューブの世界にようこそ (出前授業)", 仙台市立仙台星陵中教育学校　一日大学, 仙台市立仙台星陵中教育学校, (2019.11.13).

887. F. R. Pratama, M. S. Ukhtary, R. Saito: "Magnetizations and De Haas-van Alphen oscillations in the Dirac fermions", The 60th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 60), On-line by Zoom, Nagoya University, (2021.3.1-3).

888. R. Saito, N. T. Hung, M. S. Ukhtary: "Second harmonic generation in two-dimensional Janus TMDs", The 60th Fullerenes-Nanotubes-Graphene General Symposium (FNTG 60), On-line by Zoom, Nagoya University, (2021.3.1-3).

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892. R. Saito: "Optical properties of carbon nanotube and two-dimensional material (keynote)", International Conference on the Science and Application of Nanotubes and Low-Dimensional Materials (NT21), On-line by Zoom, Rice University, (2021.6.6-11).

893. M. S. Ukhtary, Y. Tian, R. Saito: "Spin-current generation by edge-plasmon in graphene ribbon", International Conference on the Science and Application of Nanotubes and Low-Dimensional Materials (NT21), On-line by Zoom, Rice University, (2021.6.6-11).

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897. N. T. Hung, R. Saito: "The origin of quantum effects in low-Diimensional thermoelectric materials", International Conference on the Science and Application of Nanotubes and Low-Dimensional Materials (NT21), On-line by Zoom, Rice University, (2021.6.6-11).

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902. R. Saito, N. T. Hung, Y. Zhao, S. Han, L. Tong: "Complex Raman Tensor in Black Phosphorus and 2D materials", 62th FNTG General Symposium, Nagoya University, On line, (2022.3.2-4).

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905. N. T. Hung, A. R. T. Nugraha, R. Saito: "Searching high thermoelectric performance of atomic layers and topological materials based on the band structures", Kick-off Symposium on e-ASIA JRP : Data-driven design of high-performance thermoelectrics, Thailand, On line, (2022.6.7).

906. R. Saito: "31 years of research on carbon nanotubes (invited)", 2022 Summer Meeting on Interdisciplinary Materials Science, Hanoi University of Science and Technologh, Vietnam, (2022.7.19).

907. R. Saito, N. T. Hung, R. Natsui, Y. Nakanishi, Y. Miyata: "Raman spectra of In-intercalated WTe

nanowires (invited)", 12th A3 Symposium on Emerging Materials: Nanomaterials for Electronics, Energy, and Environment, Waseda University, Tokyo, (2022.11.7-9).

908. S. Wang, M. Liu, D. Levshov, I. Kohama, T. Inoue, N. T. Hung, Y. Feng, E. I. Kauppinen, R. Xiang, R. Saito, S. Maruyama: "Optical properties of heterostructured SWCNT@BN film and BNNT film", 12th A3 Symposium on Emerging Materials: Nanomaterials for Electronics, Energy, and Environment, Waseda University, Tokyo, (2022.11.7-9).

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911. N. T. Hung, A. R. T. Nugraha, F. R. Pratama, R. Saito: "3D semimetal for thermoelectricity", VANJ Conference 2022, The University of Tokyo, (2022.11.26-27).

912. 齋藤 理一郎: "ラマン分光で測るカーボンナノチューブの鏡像異性体", ナノカーボン研究会, 新世代研究所, ニューウェルシティ湯河原, (2023.1.16).

913. R. Saito: "Challenges of carbon nanotubes with Prof. Millie Dresselhaus and Prof. Gene Dresselhaus (keynote) ", Workshop in honor of Prof. Millie and Gene Dresselhaus & Celebrating the retirement of Prof. Riichiro Saito, 34-401, MIT, Boston, USA, (2023.2.20).

914. R. Saito: "Progress and Perspective of Carbon Nanotub (invited)", The 64th Fullerenes-Nanotubes-Graphene General Symposium, Nagoya University, Nagoya, (2023.3.1-3).

915. Y. Tian, R. Xi, J. Dpi,amo. A. Baydin, H. Zhu, J. Kono, R. Saito: "Second harmonic generation in enantiomer enriched, aligend, chiral carbon nanotubes", The 64th Fullerenes-Nanotubes-Graphene General Symposium, Nagoya University, Nagoya, (2023.3.1-3).

916. R. Natsui,1 Y. Nakanishi, Z. Liu, N. T. Hung, Y.-C. Lin, T. Endo, K. Suenaga, R. Saito, and Y. Miyata: "Polarized Raman spectroscopy of indium-intercalated nanofibers of W_6Te_6 atomic wires", The 64th Fullerenes-Nanotubes-Graphene General Symposium, Nagoya University, Nagoya, (2023.3.1-3).

917. 齋藤 理一郎: "カーボンナノチューブとともに（最終講義）", 最終講義、物理学専攻、東北大学, Tohoku University, Sendai, (2023.3.10).

918. R. Saito: "Raman spectra and optical properties of nanotubes, TMD nanowire, and 2D materials (invited)", Workshop on Nanomaterial, National Taiwan Normal University, Taipei, (2023.3.23).

919. R. Saito: "Five Challenges of Carbon Nanotubes (invited)", Xinda lectures series, Pekin University, China, (2023.6.23).

920. R. Saito: "Five Challenges of Carbon Nanotubes (invited)", Special workshop at IMR, Institute of Metal Research, ShenYang, China, (2023.6.27).

921. R. Saito: "Five Challenges of Carbon Nanotubes (invited)", Lectures series to the graduate students, Liaoning Petrochemical University, Choshun, China, (2023.6.27).

922. 齋藤 理一郎: "グラフェンに関する 10 個のストーリー (invited)", 物理学会講話, online, (2023.7.1).

923. 齋藤 理一郎: "低次元半導体物質の研究戦略ーナノチューブ、２次元物質ー (基調講演)", 第 42 回電子材料シンポジウム, The Kashihara, 奈良県橿原市, (2023.10.11).

924. R. Saito: "Progress on Resonant Raman spectroscopy of 1D and 2D materials (invited)", Seminar in N-Center, Sungkyunkwan University, N-Center, Sungkyunkwan University, Suwon, Korea, (2023.10.27).

925. 齋藤 理一郎: "BN チューブ内包カーボンナノチューブのラマン分光 (招待講演)", ATI コンファレンス, Royal Hotel 八ヶ岳, 山梨県北杜市, (2023.11.13).

926. 齋藤 理一郎: "１次元２次元半導体物質の戦略と CVD (基調講演）", 化学工学会 CVD 反応分科会 第 39 回シンポジウム, 62W 号館, 早稲田大学, (2023.11.14).

927. R. Saito: "30 years of Carbon Nanotubes (invited)", Colloquim in National Taiwan University, National Taiwan University, Taipei, Taiwan, (2023.11.28).

928. R. Saito: “Ten stories of graphene (invited)”, Physics Colloquim in National Taiwan Normal University, National Taiwan Normal University, Taipei, Taiwan, (2023.11.29).

929. 夏井 隆佑, 中西 勇介, 劉 崢, グエン フン タン, 林 永昌, 遠藤 尚彦, 末永 和知, 齋藤 理一郎, 宮田 耕充: “W_6Te_6 原子細線への金属原子挿入と光学特性”, 第 85 回応用物理学会学術講演会, 朱鷺メッセ, 新潟, (2024.9.16-20).

930. 齋藤 理一郎: “ナノチューブのらせん度に依存した光物性 (招待講演)”, 第 85 回応用物理学会学術講演会, 朱鷺メッセ, 新潟, (2024.9.16-20).

VIII　その他

学位

- 理学修士：Vibronic States in Linear Conjugated Systems (1982.3.29) 東京大学.
- 理学博士：Orbital Susceptibility of Graphite Intercalation Compounds, Tokyo University (1985.3.29). 東京大学.