

Ladislav Kavan

List of Publications by Year in descending order

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docs citations

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17172
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Electrochemical and Photoelectrochemical Investigation of Single-Crystal Anatase. Journal of the American Chemical Society, 1996, 118, 6716-6723. | 6.6 | 1,312 |
| 2 | Organized Mesoporous TiO ₂ Films Exhibiting Greatly Enhanced Performance in Dye-Sensitized Solar Cells. Nano Letters, 2005, 5, 1789-1792. | 4.5 | 520 |
| 3 | Optically Transparent Cathode for Dye-Sensitized Solar Cells Based on Graphene Nanoplatelets. ACS Nano, 2011, 5, 165-172. | 7.3 | 500 |
| 4 | Pseudocapacitive Lithium Storage in TiO ₂ (B). Chemistry of Materials, 2005, 17, 1248-1255. | 3.2 | 467 |
| 5 | Rocking Chair Lithium Battery Based on Nanocrystalline TiO ₂ (Anatase). Journal of the Electrochemical Society, 1995, 142, L142-L144. | 1.3 | 430 |
| 6 | Raman spectra of titanium dioxide (anatase, rutile) with identified oxygen isotopes (16, 17, 18). Physical Chemistry Chemical Physics, 2012, 14, 14567. | 1.3 | 417 |
| 7 | Highly efficient semiconducting TiO ₂ photoelectrodes prepared by aerosol pyrolysis. Electrochimica Acta, 1995, 40, 643-652. | 2.6 | 413 |
| 8 | Lithium Storage in Nanostructured TiO ₂ Made by Hydrothermal Growth. Chemistry of Materials, 2004, 16, 477-485. | 3.2 | 406 |
| 9 | Highly efficient sensitization of titanium dioxide. Journal of the American Chemical Society, 1985, 107, 2988-2990. | 6.6 | 392 |
| 10 | Nanocrystalline TiO ₂ (Anatase) Electrodes: Surface Morphology, Adsorption, and Electrochemical Properties. Journal of the Electrochemical Society, 1996, 143, 394-400. | 1.3 | 371 |
| 11 | Metal free sensitizer and catalyst for dye sensitized solar cells. Energy and Environmental Science, 2013, 6, 3439. | 15.6 | 365 |
| 12 | Graphene Nanoplatelets Outperforming Platinum as the Electrocatalyst in Co-Bipyridine-Mediated Dye-Sensitized Solar Cells. Nano Letters, 2011, 11, 5501-5506. | 4.5 | 350 |
| 13 | Preparation of TiO ₂ (anatase) films on electrodes by anodic oxidative hydrolysis of TiCl ₃ . Journal of Electroanalytical Chemistry, 1993, 346, 291-307. | 1.9 | 283 |
| 14 | Raman 2D-Band Splitting in Graphene: Theory and Experiment. ACS Nano, 2011, 5, 2231-2239. | 7.3 | 271 |
| 15 | Li Insertion into Li ₄ Ti ₅ O ₁₂ (Spinel). Journal of the Electrochemical Society, 2003, 150, A1000. | 1.3 | 269 |
| 16 | Graphene Nanoplatelet Cathode for Co(III)/(II) Mediated Dye-Sensitized Solar Cells. ACS Nano, 2011, 5, 9171-9178. | 7.3 | 258 |
| 17 | The Influence of Strong Electron and Hole Doping on the Raman Intensity of Chemical Vapor-Deposition Graphene. ACS Nano, 2010, 4, 6055-6063. | 7.3 | 243 |
| 18 | Copper Bipyridyl Redox Mediators for Dye-Sensitized Solar Cells with High Photovoltage. Journal of the American Chemical Society, 2016, 138, 15087-15096. | 6.6 | 239 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Orientation Dependence of Charge-Transfer Processes on TiO ₂ (Anatase) Single Crystals. Journal of the Electrochemical Society, 2000, 147, 1467. | 1.3 | 224 |
| 20 | Electrochemical Tuning of Electronic Structure of Single-Walled Carbon Nanotubes: In-situ Raman and Vis-NIR Study. Journal of Physical Chemistry B, 2001, 105, 10764-10771. | 1.2 | 224 |
| 21 | Surfactant-Templated TiO ₂ (Anatase): Characteristic Features of Lithium Insertion Electrochemistry in Organized Nanostructures. Journal of Physical Chemistry B, 2000, 104, 12012-12020. | 1.2 | 222 |
| 22 | Facile Synthesis of Nanocrystalline Li ₄ Ti ₅ O ₁₂ (Spinel) Exhibiting Fast Li Insertion. Electrochemical and Solid-State Letters, 2002, 5, A39. | 2.2 | 214 |
| 23 | Study of nanocrystalline TiO ₂ (anatase) electrode in the accumulation regime. Journal of Electroanalytical Chemistry, 1995, 394, 93-102. | 1.9 | 203 |
| 24 | Electrochemical Characterization of TiO ₂ Blocking Layers for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16408-16418. | 1.5 | 201 |
| 25 | Interaction between graphene and copper substrate: The role of lattice orientation. Carbon, 2014, 68, 440-451. | 5.4 | 180 |
| 26 | Quantum size effects in nanocrystalline semiconducting titania layers prepared by anodic oxidative hydrolysis of titanium trichloride. The Journal of Physical Chemistry, 1993, 97, 9493-9498. | 2.9 | 172 |
| 27 | Electrochemical Carbon. Chemical Reviews, 1997, 97, 3061-3082. | 23.0 | 167 |
| 28 | Spectroelectrochemistry of Carbon Nanostructures. ChemPhysChem, 2007, 8, 974-998. | 1.0 | 158 |
| 29 | Inverted Solution Processable OLEDs Using a Metal Oxide as an Electron Injection Contact.. Advanced Functional Materials, 2008, 18, 145-150. | 7.8 | 158 |
| 30 | Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. Energy and Environmental Science, 2018, 11, 1779-1787. | 15.6 | 148 |
| 31 | Reductive Preparation of Carbyne with High Yield. An in Situ Raman Scattering Study. Macromolecules, 1995, 28, 344-353. | 2.2 | 134 |
| 32 | The control of graphene double-layer formation in copper-catalyzed chemical vapor deposition. Carbon, 2012, 50, 3682-3687. | 5.4 | 120 |
| 33 | Electrochemistry of titanium dioxide: some aspects and highlights. Chemical Record, 2012, 12, 131-142. | 2.9 | 118 |
| 34 | Ultrathin Buffer Layers of SnO ₂ by Atomic Layer Deposition: Perfect Blocking Function and Thermal Stability. Journal of Physical Chemistry C, 2017, 121, 342-350. | 1.5 | 118 |
| 35 | Optically Transparent Cathode for Co(III/II) Mediated Dye-Sensitized Solar Cells Based on Graphene Oxide. ACS Applied Materials & Interfaces, 2012, 4, 6999-7006. | 4.0 | 111 |
| 36 | In situ Raman and Vis-NIR spectroelectrochemistry at single-walled carbon nanotubes. Chemical Physics Letters, 2000, 328, 363-368. | 1.2 | 105 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Facile Conversion of Electrospun TiO ₂ into Titanium Nitride/Oxynitride Fibers. Chemistry of Materials, 2010, 22, 4045-4055. | 3.2 | 104 |
| 38 | Raman Spectroscopy and in Situ Raman Spectroelectrochemistry of Bilayer ¹² C/ ¹³ C Graphene. Nano Letters, 2011, 11, 1957-1963. | 4.5 | 104 |
| 39 | Lithium Insertion into Mesoscopic and Single-Crystal TiO ₂ (Rutile) Electrodes. Journal of the Electrochemical Society, 1999, 146, 1375-1379. | 1.3 | 103 |
| 40 | Insight into boron-doped diamond Raman spectra characteristic features. Carbon, 2017, 115, 279-284. | 5.4 | 103 |
| 41 | Mesoporous thin film TiO ₂ electrodes. Microporous and Mesoporous Materials, 2001, 44-45, 653-659. | 2.2 | 102 |
| 42 | Probing high-pressure properties of single-wall carbon nanotubes through fullerene encapsulation. Physical Review B, 2008, 77, . | 1.1 | 93 |
| 43 | Electrochemistry and dye-sensitized solar cells. Current Opinion in Electrochemistry, 2017, 2, 88-96. | 2.5 | 91 |
| 44 | Charge transfer reductive doping of single crystal TiO ₂ anatase. Journal of Electroanalytical Chemistry, 2004, 566, 73-83. | 1.9 | 90 |
| 45 | Novel 2 V rocking-chair lithium battery based on nano-crystalline titanium dioxide. Journal of Power Sources, 1997, 68, 720-722. | 4.0 | 88 |
| 46 | Graphene-based cathodes for liquid-junction dye sensitized solar cells: Electrocatalytic and mass transport effects. Electrochimica Acta, 2014, 128, 349-359. | 2.6 | 88 |
| 47 | Capacitive contribution to Li-storage in TiO ₂ (B) and TiO ₂ (anatase). Journal of Power Sources, 2014, 246, 103-109. | 4.0 | 86 |
| 48 | Lithium Insertion into Zirconia-Stabilized Mesoscopic TiO ₂ (Anatase). Journal of the Electrochemical Society, 2000, 147, 2897. | 1.3 | 82 |
| 49 | Defects in Individual Semiconducting Single Wall Carbon Nanotubes: Raman Spectroscopic and in Situ Raman Spectroelectrochemical Study. Nano Letters, 2010, 10, 4619-4626. | 4.5 | 79 |
| 50 | Work Function of TiO ₂ (Anatase, Rutile, and Brookite) Single Crystals: Effects of the Environment. Journal of Physical Chemistry C, 2021, 125, 1902-1912. | 1.5 | 77 |
| 51 | Carbyne forms of carbon: continuation of the story. Carbon, 1994, 32, 1533-1536. | 5.4 | 75 |
| 52 | Electrochemical Tuning of Electronic Structure of C ₆₀ and C ₇₀ Fullerene Peapods: In Situ Visible Near-Infrared and Raman Study. Journal of Physical Chemistry B, 2003, 107, 7666-7675. | 1.2 | 75 |
| 53 | Single Layer Molybdenum Disulfide under Direct Out-of-Plane Compression: Low-Stress Band-Gap Engineering. Nano Letters, 2015, 15, 3139-3146. | 4.5 | 75 |
| 54 | Electrochemical carbyne from perfluorinated hydrocarbons: Synthesis and stability studied by Raman scattering. Carbon, 1995, 33, 1321-1329. | 5.4 | 74 |

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|----|---|-----|-----------|
| 55 | Novel Synthesis of the TiO ₂ (B) Multilayer Templated Films. <i>Chemistry of Materials</i> , 2009, 21, 1457-1464. | 3.2 | 69 |
| 56 | Multi-walled carbon nanotubes functionalized by carboxylic groups: Activation of TiO ₂ (anatase) and phosphate olivines (LiMnPO ₄ ; LiFePO ₄) for electrochemical Li-storage. <i>Journal of Power Sources</i> , 2010, 195, 5360-5369. | 4.0 | 68 |
| 57 | Fabrication of porous boron-doped diamond on SiO ₂ fiber templates. <i>Carbon</i> , 2017, 114, 457-464. | 5.4 | 68 |
| 58 | Lithium Insertion into Anatase Inverse Opal. <i>Journal of the Electrochemical Society</i> , 2004, 151, A1301. | 1.3 | 65 |
| 59 | Phonon and Structural Changes in Deformed Bernal Stacked Bilayer Graphene. <i>Nano Letters</i> , 2012, 12, 687-693. | 4.5 | 65 |
| 60 | Electrochemistry and in situ Raman spectroelectrochemistry of low and high quality boron doped diamond layers in aqueous electrolyte solution. <i>Electrochimica Acta</i> , 2013, 87, 518-525. | 2.6 | 65 |
| 61 | Voltage enhancement in dye-sensitized solar cell using (001)-oriented anatase TiO ₂ nanosheets. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 2993-3001. | 1.2 | 64 |
| 62 | Water splitting and the band edge positions of TiO ₂ . <i>Electrochimica Acta</i> , 2016, 199, 27-34. | 2.6 | 64 |
| 63 | Electrochemical Properties of Cu(II/I)-Based Redox Mediators for Dye-Sensitized Solar Cells. <i>Electrochimica Acta</i> , 2017, 227, 194-202. | 2.6 | 63 |
| 64 | Ionic Liquid for in situ Vis/NIR and Raman Spectroelectrochemistry: Doping of Carbon Nanostructures. <i>ChemPhysChem</i> , 2003, 4, 944-950. | 1.0 | 62 |
| 65 | In situ Vis-NIR and Raman spectroelectrochemistry at fullerene peapods. <i>Chemical Physics Letters</i> , 2002, 361, 79-85. | 1.2 | 61 |
| 66 | Electrochemical tuning of electronic structure of carbon nanotubes and fullerene peapods. <i>Carbon</i> , 2004, 42, 1011-1019. | 5.4 | 61 |
| 67 | Development of the Tangential Mode in the Raman Spectra of SWCNT Bundles during Electrochemical Charging. <i>Nano Letters</i> , 2008, 8, 1257-1264. | 4.5 | 60 |
| 68 | Multilayer Films from Templated TiO ₂ and Structural Changes during their Thermal Treatment. <i>Chemistry of Materials</i> , 2008, 20, 2985-2993. | 3.2 | 59 |
| 69 | Electrochemical Doping of Chirality-Resolved Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19613-19619. | 1.2 | 57 |
| 70 | Modeling Ruthenium-Dye-Sensitized TiO ₂ Surfaces Exposing the (001) or (101) Faces: A First-Principles Investigation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18124-18131. | 1.5 | 55 |
| 71 | Conductivity of boron-doped polycrystalline diamond films: influence of specific boron defects. <i>European Physical Journal B</i> , 2013, 86, 1. | 0.6 | 55 |
| 72 | Structural parameters controlling the performance of organized mesoporous TiO ₂ films in dye sensitized solar cells. <i>Inorganica Chimica Acta</i> , 2008, 361, 656-662. | 1.2 | 52 |

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| 73 | Analysis of heavily boron-doped diamond Raman spectrum. <i>Diamond and Related Materials</i> , 2018, 88, 163-166. | 1.8 | 52 |
| 74 | Electrochemical Charging of Individual Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2009, 3, 2320-2328. | 7.3 | 51 |
| 75 | Lithium insertion into TiO ₂ (anatase): electrochemistry, Raman spectroscopy, and isotope labeling. <i>Journal of Solid State Electrochemistry</i> , 2014, 18, 2297-2306. | 1.2 | 51 |
| 76 | Oxidation of Acetonitrile-Based Electrolyte Solutions at High Potentials: An In Situ Fourier Transform Infrared Spectroscopy Study. <i>Journal of the Electrochemical Society</i> , 1993, 140, 3390-3395. | 1.3 | 50 |
| 77 | Diameter-Selective Electrochemical Doping of HiPco Single-Walled Carbon Nanotubes. <i>Nano Letters</i> , 2003, 3, 969-972. | 4.5 | 49 |
| 78 | Polycrystalline TiO ₂ Anatase with a Large Proportion of Crystal Facets (001): Lithium Insertion Electrochemistry. <i>Journal of the Electrochemical Society</i> , 2010, 157, A1108. | 1.3 | 49 |
| 79 | Two Positions of Potassium in Chemically Doped C ₆₀ Peapods: An in situ Spectroelectrochemical Study. <i>Journal of Physical Chemistry B</i> , 2004, 108, 6275-6280. | 1.2 | 48 |
| 80 | Surface preparation of TiO ₂ anatase (101): Pitfalls and how to avoid them. <i>Surface Science</i> , 2014, 626, 61-67. | 0.8 | 47 |
| 81 | Nafion modified TiO ₂ electrodes: photoresponse and sensitization by Ru(II)-bipyridyl complexes. <i>Electrochimica Acta</i> , 1989, 34, 1327-1334. | 2.6 | 46 |
| 82 | Phase-pure nanocrystalline Li ₄ Ti ₅ O ₁₂ for a lithium-ion battery. <i>Journal of Solid State Electrochemistry</i> , 2003, 8, 2-6. | 1.2 | 46 |
| 83 | Oxygen-isotope labeled titania: Ti ₁₈ O ₂ . <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 11583. | 1.3 | 46 |
| 84 | Low-temperature Fabrication of Highly-Efficient, Optically-Transparent (FTO-free) Graphene Cathode for Co-Mediated Dye-Sensitized Solar Cells with Acetonitrile-free Electrolyte Solution. <i>Electrochimica Acta</i> , 2016, 195, 34-42. | 2.6 | 46 |
| 85 | In-Situ Vis-Near-Infrared and Raman Spectroelectrochemistry of Double-Walled Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2005, 15, 418-426. | 7.8 | 45 |
| 86 | Molecular Design of Efficient Organic Dye Featuring Triphenylamine as Donor Fragment for Application in Dye-Sensitized Solar Cells. <i>ChemSusChem</i> , 2018, 11, 494-502. | 3.6 | 45 |
| 87 | Cold gas dynamic spraying (CGDS) of TiO ₂ (anatase) powders onto poly(sulfone) substrates: Microstructural characterisation and photocatalytic efficiency. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 187, 285-292. | 2.0 | 44 |
| 88 | Competition between the Spring Force Constant and the Phonon Energy Renormalization in Electrochemically Doped Semiconducting Single-Walled Carbon Nanotubes. <i>Nano Letters</i> , 2008, 8, 3532-3537. | 4.5 | 43 |
| 89 | Resolving the Controversy about the Band Alignment between Rutile and Anatase: The Role of OH ⁺ /H ⁺ Adsorption. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21952-21958. | 1.5 | 43 |
| 90 | Novel highly active Pt/graphene catalyst for cathodes of Cu(II/I)-mediated dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2017, 251, 167-175. | 2.6 | 43 |

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| 91 | Conduction band engineering in semiconducting oxides (TiO ₂ , SnO ₂): Applications in perovskite photovoltaics and beyond. <i>Catalysis Today</i> , 2019, 328, 50-56. | 2.2 | 43 |
| 92 | Electrochemical tuning of high energy phonon branches of double wall carbon nanotubes. <i>Carbon</i> , 2004, 42, 2915-2920. | 5.4 | 41 |
| 93 | Interaction of nanodiamond with in situ generated sp-carbon chains probed by Raman spectroscopy. <i>Carbon</i> , 2006, 44, 3113-3116. | 5.4 | 39 |
| 94 | Enhancement of Electrochemical Activity of LiFePO ₄ (olivine) by Amphiphilic Ru-bipyridine Complex Anchored to a Carbon Nanotube. <i>Chemistry of Materials</i> , 2007, 19, 4716-4721. | 3.2 | 39 |
| 95 | Sexithiophene Encapsulated in a Single-Walled Carbon Nanotube: An In Situ Raman Spectroelectrochemical Study of a Peapod Structure. <i>Chemistry - A European Journal</i> , 2010, 16, 11753-11759. | 1.7 | 39 |
| 96 | Photochemistry and Gas-Phase FTIR Spectroscopy of Formic Acid Interaction with Anatase Ti ₁₈ O ₂ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11200-11205. | 1.5 | 38 |
| 97 | Sol-Gel Titanium Dioxide Blocking Layers for Dye-Sensitized Solar Cells: Electrochemical Characterization. <i>ChemPhysChem</i> , 2014, 15, 1056-1061. | 1.0 | 38 |
| 98 | Carbon isotope labelling in graphene research. <i>Nanoscale</i> , 2014, 6, 6363. | 2.8 | 38 |
| 99 | Strain Assessment in Graphene Through the Raman 2D ² Mode. <i>Journal of Physical Chemistry C</i> , 2015, 119, 25651-25656. | 1.5 | 38 |
| 100 | Alternative bases to 4-tert-butylpyridine for dye-sensitized solar cells employing copper redox mediator. <i>Electrochimica Acta</i> , 2018, 265, 194-201. | 2.6 | 38 |
| 101 | Charge transfer between two immiscible electrolyte solutions. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1983, 145, 213-218. | 0.3 | 37 |
| 102 | Lithium insertion into titanium dioxide (anatase) electrodes: microstructure and electrolyte effects. <i>Journal of Solid State Electrochemistry</i> , 2001, 5, 196-204. | 1.2 | 37 |
| 103 | Time-dependent electrical resistivity of carbon. <i>The Journal of Physical Chemistry</i> , 1990, 94, 5127-5134. | 2.9 | 36 |
| 104 | Mesoporous electrode material from alumina-stabilized anatase TiO ₂ for lithium ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2005, 9, 138-145. | 1.2 | 36 |
| 105 | Electrochemical characterization of porous boron-doped diamond prepared using SiO ₂ fiber template. <i>Diamond and Related Materials</i> , 2018, 87, 61-69. | 1.8 | 36 |
| 106 | An in situ Raman spectroelectrochemical study of the controlled doping of single walled carbon nanotubes in a conducting polymer matrix. <i>Carbon</i> , 2007, 45, 1463-1470. | 5.4 | 35 |
| 107 | Oxygen-Isotope Exchange between CO ₂ and Solid Ti ₁₈ O ₂ . <i>Journal of Physical Chemistry C</i> , 2011, 115, 11156-11162. | 1.5 | 35 |
| 108 | Boron-doped Diamond Electrodes: Electrochemical, Atomic Force Microscopy and Raman Study towards Corrosion-modifications at Nanoscale. <i>Electrochimica Acta</i> , 2015, 179, 626-636. | 2.6 | 35 |

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|-----|---|-----|-----------|
| 109 | Tuning of Sorted Double-Walled Carbon Nanotubes by Electrochemical Charging. ACS Nano, 2010, 4, 459-469. | 7.3 | 34 |
| 110 | Effects of Heat Treatment on Raman Spectra of Twoâ€Layer ¹² C/ ¹³ C Graphene. Chemistry - A European Journal, 2012, 18, 13877-13884. | 1.7 | 34 |
| 111 | Electron-Selective Layers for Dye-Sensitized Solar Cells Based on TiO ₂ and SnO ₂ . Journal of Physical Chemistry C, 2020, 124, 6512-6521. | 1.5 | 34 |
| 112 | Perfluoro anion-exchange polymeric films on glassy carbon electrodes. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 280, 313-325. | 0.3 | 32 |
| 113 | Carbonaceous materials from end-capped alkynes. Carbon, 2002, 40, 345-349. | 5.4 | 32 |
| 114 | Spectroelectrochemistry of Carbon Nanotubes. ChemPhysChem, 2011, 12, 47-55. | 1.0 | 32 |
| 115 | The influence of doping on the Raman intensity of the D band in single walled carbon nanotubes. Carbon, 2010, 48, 832-838. | 5.4 | 31 |
| 116 | Search for the form of fullerene C60 in aqueous medium. Physical Chemistry Chemical Physics, 2010, 12, 14095. | 1.3 | 31 |
| 117 | Electrochemical Doping of Double-Walled Carbon Nanotubes: An In Situ Raman Spectroelectrochemical Study. ChemPhysChem, 2004, 5, 274-277. | 1.0 | 30 |
| 118 | Chemical States of Electrochemically Doped Single Wall Carbon Nanotubes As Probed by Raman Spectroelectrochemistry and ex Situ X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 13856-13861. | 1.5 | 30 |
| 119 | EPR study of 17O-enriched titania nanopowders under UV irradiation. Catalysis Today, 2014, 230, 112-118. | 2.2 | 30 |
| 120 | Electrochemical, IR and XPS study of Nafion films prepared from hexamethylphosphortriamide solution. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 199, 81-92. | 0.3 | 29 |
| 121 | On the stability of polyynes. Chemical Physics, 1992, 168, 249-258. | 0.9 | 29 |
| 122 | Polymerisation of 1-iodohexa-1,3,5-triyne and hexa-1,3,5-triyne: a new synthesis of carbon nanotubes at low temperatures. Chemical Communications, 2000, , 737-738. | 2.2 | 29 |
| 123 | Nanobubble-assisted formation of carbon nanostructures on basal plane highly ordered pyrolytic graphite exposed to aqueous media. Nanotechnology, 2010, 21, 095707. | 1.3 | 29 |
| 124 | Exploiting Nanocarbons in Dye-Sensitized Solar Cells. Topics in Current Chemistry, 2013, 348, 53-93. | 4.0 | 29 |
| 125 | ZnOâ€ionic liquid hybrid films: electrochemical synthesis and application in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 10173. | 5.2 | 27 |
| 126 | The origin of methane and biomolecules from a CO2 cycle on terrestrial planets. Nature Astronomy, 2017, 1, 721-726. | 4.2 | 27 |

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|-----|---|-----|-----------|
| 127 | XPS study of carbon in electrochemical reduction products of poly(tetrafluoroethylene). Carbon, 1984, 22, 77-81. | 5.4 | 26 |
| 128 | Influence of an Extended Fullerene Cage: Study of Chemical and Electrochemical Doping of C70 Peapods by in Situ Raman Spectroelectrochemistry. Journal of Physical Chemistry C, 2007, 111, 1079-1085. | 1.5 | 26 |
| 129 | Organized Mesoporous TiO ₂ Films Stabilized by Phosphorus: Application for Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2010, 157, H99. | 1.3 | 26 |
| 130 | Probing Charge Transfer between Shells of Double-Walled Carbon Nanotubes Sorted by Outer-Wall Electronic Type. Chemistry - A European Journal, 2011, 17, 9806-9815. | 1.7 | 26 |
| 131 | Application of graphene-based nanostructures in dye-sensitized solar cells. Physica Status Solidi (B): Basic Research, 2013, 250, 2643-2648. | 0.7 | 26 |
| 132 | In situ Raman spectroelectrochemistry of graphene oxide. Physica Status Solidi (B): Basic Research, 2013, 250, 2662-2667. | 0.7 | 26 |
| 133 | Electrochemical impedance spectroscopy of polycrystalline boron doped diamond layers with hydrogen and oxygen terminated surface. Diamond and Related Materials, 2015, 55, 70-76. | 1.8 | 26 |
| 134 | Precursor gas composition optimisation for large area boron doped nano-crystalline diamond growth by MW-LA-PECVD. Carbon, 2018, 128, 164-171. | 5.4 | 26 |
| 135 | The Intermediate Frequency Modes of Single- and Double-Walled Carbon Nanotubes: A Raman Spectroscopic and In Situ Raman Spectroelectrochemical Study. Chemistry - A European Journal, 2006, 12, 4451-4457. | 1.7 | 25 |
| 136 | Changes in the Electronic States of Single-Walled Carbon Nanotubes as Followed by a Raman Spectroelectrochemical Analysis of the Radial Breathing Mode. Journal of Physical Chemistry C, 2008, 112, 16759-16763. | 1.5 | 25 |
| 137 | Dye-sensitization of boron-doped diamond foam: champion photoelectrochemical performance of diamond electrodes under solar light illumination. RSC Advances, 2015, 5, 81069-81077. | 1.7 | 25 |
| 138 | The role of ion transport in the electrochemical corrosion of fluoropolymers. Preparation and properties of n-doped polymeric carbon with mixed ion/electron conductivity. Solid State Ionics, 1990, 38, 109-118. | 1.3 | 24 |
| 139 | Electrochemical Doping of Compact TiO ₂ Thin Layers. Journal of Physical Chemistry C, 2014, 118, 25970-25977. | 1.5 | 24 |
| 140 | In situ Raman spectroelectrochemistry as a useful tool for detection of TiO ₂ (anatase) impurities in TiO ₂ (B) and TiO ₂ (rutile). Monatshefte für Chemie, 2016, 147, 951-959. | 0.9 | 24 |
| 141 | Formation of Methane and (Per)Chlorates on Mars. ACS Earth and Space Chemistry, 2019, 3, 221-232. | 1.2 | 24 |
| 142 | Carbynoid species in electrochemical polymeric carbon. Synthetic Metals, 1993, 58, 63-72. | 2.1 | 23 |
| 143 | Anodic oxidation of dimethyl sulfoxide based electrolyte solutions: An in situ FTIR study. Journal of Applied Electrochemistry, 1996, 26, 523-527. | 1.5 | 23 |
| 144 | Carbonization of Highly Oriented Poly(tetrafluoroethylene). Chemistry of Materials, 1999, 11, 329-335. | 3.2 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Transformation of fullerene peapods to double-walled carbon nanotubes induced by UV radiation. Carbon, 2005, 43, 1610-1616. | 5.4 | 23 |
| 146 | In situ EPR spectroelectrochemistry of single-walled carbon nanotubes and C60 fullerene peapods. Carbon, 2006, 44, 2147-2154. | 5.4 | 23 |
| 147 | The Change of the State of an Endohedral Fullerene by Encapsulation into SWCNT: A Raman Spectroelectrochemical Study of Dy ₃ N@C ₈₀ Peapods. Chemistry - A European Journal, 2007, 13, 8811-8817. | 1.7 | 23 |
| 148 | Nanocrystalline Boron-Doped Diamond as a Corrosion-Resistant Anode for Water Oxidation via Si Photoelectrodes. ACS Applied Materials & Interfaces, 2018, 10, 29552-29564. | 4.0 | 23 |
| 149 | Selectivity of Photoelectrochemical Water Splitting on TiO ₂ Anatase Single Crystals. Journal of Physical Chemistry C, 2019, 123, 10857-10867. | 1.5 | 23 |
| 150 | Electrochemical preparation of hydrogen free carbyne-like materials. Carbon, 1998, 36, 801-808. | 5.4 | 22 |
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